

HATCP77	748244	51	WUblastx .64	(Q9Y691) MAXIK CHANNEL BETA 2 SUBUNIT (LARGE CONDUCTANCE CALCIUM-ACTI	Q9Y691	100%	10	582
HBAFJ33	625916	53	WUblastx .64	(Q9GZR7) HYPOTHETICAL 96.3 KDA PROTEIN (ATP- DEPENDENT RNA HELICASE) (Q9GZR7	96%	672	950
HBAFV19	843036	54	WUblastx .64	(Q9H068) HYPOTHETICAL 69.9 KDA PROTEIN.	Q9H068	100%	3	779
HBCPB32	1352403	56	WUblastx .64	(Q96EP9) Unknown (protein for IMAGE:3502817) (Fragment).	Q96EP9	92% 100%	680 1	844 690
HBCPB32	1045580	646	HMMER 2.1.1	PFAM: Sodium Bile acid symporter family	PF01758	41.2	87	-230
			WUblastx .64	(Q96EP9) Unknown (protein for IMAGE:3502817) (Fragment).	Q96EP9	100%	2	589
HBCQL32	1027748	647	WUblastx .64	(AAH08044) Unknown (protein for MGC:16063).	AAH08044	100%	102	182
HBGNU56	1352412	58	WUblastx .64	(Q96DB9) FXYP domain-containing ion transport regulator 5 p	FXYS_HUMAN	100%	125	637
HBGNU56	1094642	648	HMMER 2.1.1	PFAM: ATP1G1/PLM/MAT8	PF02038	70.5	475	609

HBOEG11	1049830	657	.64	TISSUE GROWTH FACTOR-LIKE PROTEIN PRECURSOR (BA44)	PF00219	45.4	122	334
			WUblastx .64	(O76076) CONNECTIVE TISSUE GROWTH FACTOR-LIKE PROTEIN PRECURSOR (BA44)	O76076	100%	47	796
HBOEG69	793786	72	WUblastx .64	(Q9NS11) LIPOPOLYSACCHARID E SPECIFIC RESPONSE- 68 PROTEIN.	Q9NS11	71% 100%	424 345	314 196
HBXFL29	842802	73	WUblastx .64	(Q8WYF7) POB1.	Q8WYF7	99%	4	1008
HCACU58	625923	74	WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KAIA0536.	Q9NX85	69%	548	820
HCACV51	1306706	75	WUblastx .64	(Q99LM9) UNKNOWN (PROTEIN FOR MGC:8251).	Q99LM9	85%	8	1009
HCACV51	598022	658	WUblastx .64	(Q96BN2) Similar to RIKEN cDNA 2900026B15 gene.	Q96BN2	97% 91%	13 323	312 1015
HCE1Q89	520329	77	WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KAIA0536.	Q9NX85	86% 61% 65%	590 645 859	525 592 683

HCE2F54	634016	78	HMMER 2.1.1	PFAM: Histone-like transcription factor (CBF/NF-Y) and archael histone	PF00808	19	868	1005
			WUblastx .64	(AAH07642) Unknown (protein for IMAGE:3534358) (Fra	AAH07642	82%	298	1122
HCEFB80	1143407	79	WUblastx .64	(Q96FR3) Unknown (protein for MGC:18083).	Q96FR3	100%	1785	1979
HCEFB80	1046853	659	WUblastx .64	(Q96FR3) Unknown (protein for MGC:18083).	Q96FR3	100%	1777	1971
HCEGR33	425212	80	WUblastx .64	(Q9H743) CDNA: FLJ21394 FIS, CLONE COL03536.	Q9H743	51% 42% 58%	1002 1379 907	1079 1492 993
HCEMP62	684780	81	WUblastx .64	(Q8WZ37) Hypothetical 43.7 kDa protein.	Q8WZ37	75% 78% 41% 94%	484 88 1 870	897 459 183 926
HCEWE17	941941	83	WUblastx .64	(Q9H310) RH TYPE B GLYCOPROTEIN.	Q9H310	95% 100% 92%	9 425 444	341 463 566
HCEWE17	893535	661	WUblastx .64	(Q9H310) RH TYPE B GLYCOPROTEIN.	Q9H310	78% 75% 100% 100%	467 695 676 3	580 730 714 482
HCEWE17	460407	662	WUblastx .64	(Q9H310) RH TYPE B GLYCOPROTEIN.	Q9H310	96%	7	105
HCEWE20	543370	84	WUblastx .64	(Q9P1J1) PRO1546.	Q9P1J1	76% 79%	501 601	551 717
HCFOM18	553582	88	WUblastx	(Q9H728) CDNA:	Q9H728	60%	621	490

HCHNF25	1352270	89	.64	FLJ21463 FIS, CLONE COL04765.					
			WUblastx .64	(AAL76113) Androgen-induced basic leucine zipper.	AAL76113	99%	3069	2188	
HCHNF25	658672	663	WUblastx .64	(AAH00499) Jumping translocation breakpoint.	AAH00499	64%	3371	2811	
			WUblastx .64			24%	622	425	
HCNSM70	637547	95	HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047	91%	180	620	
			WUblastx .64	(O60487) EPITHELIAL V-LIKE ANTIGEN PRECURSOR (EPITHELIAL V-LIKE ANTIG	O60487	32	224	481	
						98%	107	751	
HCNSM70	589445	665	WUblastx .64	(O60487) EPITHELIAL V-LIKE ANTIGEN PRECURSOR (EPITHELIAL V-LIKE ANTIG	O60487	100%	161	409	
						99%	408	806	
HCOOS80	1134974	96	WUblastx .64	(O14641) SEGMENT POLARITY PROTEIN DISHEVELLED HOMOLOG DVL-2	DVL2_HUMAN	100%	8	637	
HCOOS80	1045182	666	WUblastx .64	(O14641) SEGMENT POLARITY PROTEIN DISHEVELLED HOMOLOG DVL-2	DVL2_HUMAN	100%	21	683	
HCOOS80	1045183	667	WUblastx .64	(O14641) SEGMENT POLARITY PROTEIN DISHEVELLED	DVL2_HUMAN	94%	65	115	
						91%	1	69	

HCUCK44	720291	98	WUblastx .64	HOMOLOG DVL-2 hypothetical protein DKFZp564J157.1 - human (fragment)	pir T34520 T34520	97%	21	524
HCUEO60	499242	99	WUblastx .64	(Q96MM0) CDNA FLJ32172 fis, clone PLACE6000555.	Q96MM0	79% 72%	1043 1222	972 1028
HCUHK65	651313	100	WUblastx .64	(Q9H3W5) HYPOTHETICAL 79.4 KDA PROTEIN.	Q9H3W5	100%	11	316
HCUHK65	880178	668	HMMER 2.1.1	PFAM: Leucine Rich Repeat	PF00560	92.1	1190	1261
			WUblastx .64	(Q9H3W5) HYPOTHETICAL 79.4 KDA PROTEIN.	Q9H3W5	100%	770	2893
HCWEB58	1352416	102	WUblastx .64	(Q92WW6) Putative sensor histidine kinase protein.	Q92WW6	41% 45% 38%	264 166 301	335 231 1167
HCWEB58	1115089	669	HMMER 2.1.1	PFAM: Domain found in bacterial signal proteins	PF00672	40.4	442	651
			WUblastx .64	sensor histidine kinase [imported] - Caulobacter crescentus	pir A87396 A87396	36% 31%	379 268	915 363
HCWEB58	889268	670	HMMER 2.1.1	PFAM: Domain found in bacterial signal proteins	PF00672	41.6	350	559
			WUblastx .64	sensor histidine kinase [imported] - Caulobacter crescentus	pir A87396 A87396	36% 31%	287 176	823 271
HCWGU37	1042325	103	WUblastx .64	(O60448) NEURONAL THREAD PROTEIN	O60448	43% 75%	2724 2373	2371 2326

HDHMA72	547772	111	WUblastx .64	(Q8WVP7) Hypothetical 55.1 kDa protein.	Q8WVP7	28%	3700	3891 1168 1231 592
HDLAC10	692299	112	WUblastx .64	(Q9UBJ4) TRANSPOSASE-LIKE PROTEIN.	Q9UBJ4	99%	29	1378
HDPBI32	1352360	114	WUblastx .64	(O88407) NEURAL MEMBRANE PROTEIN 35.	O88407	92%	37	984
HDPBI32	862851	674	WUblastx .64	(O88407) NEURAL MEMBRANE PROTEIN 35.	O88407	95% 89%	599 103	1051 603
HDPBI32	590733	675	HMMER 2.1.1	PFAM: Uncharacterized protein family	PF01027	126.8	51	461
HDPBQ71	1160316	115	WUblastx .64	(Q9BRE2) HYPOTHETICAL 68.4 KDA PROTEIN (FRAGMENT).	Q9BRE2	100%	90	1928
HDPBQ71	727200	676	WUblastx .64	(Q9BRE2) HYPOTHETICAL 68.4 KDA PROTEIN (FRAGMENT).	Q9BRE2	99%	21	1859
HDPBQ71	886067	677	WUblastx .64	(Q9H2V9) CDA08.	Q9H2V9	100% 65% 44% 21% 93%	1532 169 182 1456 186	1999 264 322 1551 1541
HDPCJ91	740748	116	WUblastx .64	(Q9H387) PRO2550.	Q9H387	53% 56%	2369 2377	2407 2676

HDPCY37	837699	118	HMMER 2.1.1	PFAM: Glycosyl hydrolase family 47	PF01532	627.5	199	1521
			WUblastx .64	(Q9H886) CDNA FLJ13869 FIS, CLONE THYRO1001287, WEAKLY SIMILAR TO MAN	Q9H886	99%	76	1809
HDPCY37	604114	678	HMMER 2.1.1	PFAM: Glycosyl hydrolase family 47	PF01532	324	199	834
			WUblastx .64	(Q9H886) CDNA FLJ13869 FIS, CLONE THYRO1001287, WEAKLY SIMILAR TO MAN	Q9H886	97% 99%	76 813	840 1808
HDPFB02	898208	119	WUblastx .64	(Q9BXR1) COSTIMULATORY MOLECULE.	Q9BXR1	98% 97% 97% 76%	146 877 495 568	499 1749 620 900
HDPFB02	1056541	679	HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047	53.2	610	804
			WUblastx .64	(Q9BXR1) COSTIMULATORY MOLECULE.	Q9BXR1	99%	139	1086
HDPFB02	997408	680	HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047	26.9	305	562
			WUblastx .64	(Q9HD18) TRANSMEMBRANE PROTEIN B7-H2 ICOS LIGAND (B7-RELATED PROTEIN-	Q9HD18	99%	218	1123

HDPFF39	588697	120	WUblastx .64	(O96005) CLEFT LIP AND PALATE TRANSMEMBRANE PROTEIN 1.	O96005	100% 100%	3 97	29 762
HDPGP94	823355	123	WUblastx .64	(Q14288) HYPOTHETICAL PROTEIN (FRAGMENT).	Q14288	47% 88% 48% 28% 39% 35% 27%	614 1297 909 1767 1093 1275 2282	216 1271 700 1537 890 1090 2082
HDPJF37	704487	125	WUblastx .64	(Q9BSQ8) UNKNOWN (PROTEIN FOR IMAGE:3510191) (FRAGMENT).	Q9BSQ8	94% 36% 93%	105 158 19	650 718 153
HDPMM88	972734	126	HMMER 2.1.1	PFAM: E1-E2 ATPase	PF00122	31	475	543
			WUblastx .64	(P98198) POTENTIAL PHOSPHOLIPID- TRANSPORTING ATPASE ID (EC	AT1D_HUMAN	68% 32%	106 2917	2907 2991
HDPMM88	906121	681	WUblastx .64	(Q96NQ7) CDNA FLJ30324 fis, clone BRACE2007138, weakly similar to PRO	Q96NQ7	50% 76%	356 3	403 365
HDPMM88	902299	682	WUblastx .64	(P98199) POTENTIAL PHOSPHOLIPID- TRANSPORTING ATPASE ID (EC	AT1D_MOUSE	73%	2	172
HDPMM88	885059	683	WUblastx	(AAH07837) Unknown	AAH07837	75%	63	16

					.64	(protein for IMAGE:4111596) (Fra			69%	598	62
HDPMM88	874074	684	WUblastx .64			(P98198) POTENTIAL PHOSPHOLIPID- TRANSPORTING ATPASE ID (EC	AT1D_HUMAN	65%	1023	1	
HDPNC61	637585	127	WUblastx .64			(Q8WY51) HC6.	Q8WY51	52% 64%	654 37	827 78	
HDPND46	637586	128	WUblastx .64			(Q9BR26) DJ257E24.3 (NOVEL PROTEIN) (FRAGMENT).	Q9BR26	81%	12	1466	
HDPOE32	897276	129	WUblastx .64			(Q9BW48) MY047 PROTEIN.	Q9BW48	98%	64	345	
HDPOH06	683371	130	HMMER 2.1.1			PFAM: Uncharacterized membrane protein family	PF01554	90.8	255	596	
			WUblastx .64			(Q96FL8) Hypothetical 61.9 kDa protein.	Q96FL8	99%	18	977	
HDPOZ56	1352319	131	WUblastx .64			(BAB84923) FLJ00168 protein (Fragment).	BAB84923	100%	28	1791	
HDPOZ56	815653	687	HMMER 2.1.1			PFAM: Flavin containing amine oxidase	PF01593	431.1	307	1614	
			WUblastx .64			(BAB84923) FLJ00168 protein (Fragment).	BAB84923	99%	40	1800	
HDPOZ56	743479	688	HMMER 2.1.1			PFAM: Flavin containing amine oxidase	PF01593	185.2	200	949	
			WUblastx .64			(BAB84923) FLJ00168 protein (Fragment).	BAB84923	98% 99% 100%	197 952 2	958 1647 202	
HDPSP54	744440	132	WUblastx .64			(BAB85063) CDNA FLJ23790 fis. clone	BAB85063	99%	2	307	

HDPTD15	692917	133		WUblastx .64	HEP21466. (Q9BU29) UNKNOWN (PROTEIN FOR IMAGE:3954899) (FRAGMENT).	Q9BU29	97%	937	833
HDPTK41	744824	134		WUblastx .64	(BAB11849) MOP-2.	BAB11849	97% 94%	1013 102	1126 1025
HDPUG50	684120	135		WUblastx .64	(Q9BVK2) UNKNOWN (PROTEIN FOR MGC:2840).	Q9BVK2	96%	55	1599
HDPVH26	866433	136		WUblastx .64	(Q8VHE7) Hypothetical 67.5 kDa protein.	Q8VHE7	80% 69%	261 162	1733 290
HDPVW68	812737	137		HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047	38.9	844	1005
				WUblastx .64	(Q9Y286) QA79 MEMBRANE PROTEIN, ALLELIC VARIANT AIRM-1B PRECURSOR.	Q9Y286	100%	40	1440
HDPVH60	796865	138		WUblastx .64	(BAB55096) CDNA FLJ14508 fis, clone NT2RM1000421, w	BAB55096	95% 38% 58% 88% 40% 29% 31% 42% 38% 27% 42% 24%	235 288 244 288 456 1215 1389 238 1607 798 1317 1604	294 473 294 1610 521 1487 1607 294 1861 1544 1478 2017

HDQHD03	1309175	142	WUblastx .64	(AAH25621) Hypothetical 137.4 kDa protein (Fragment)	AAH25621	86%	520	1263
HDQHD03	834692	694	HMMER 2.1.1	PFAM: Cyclic nucleotide- binding domain	PF00027	44.3	709	870
			WUblastx .64	(AAH25621) Hypothetical 137.4 kDa protein (Fragment)	AAH25621	84%	505	1248
HDTBD53	972757	143	WUblastx .64	(Q9BTV4) UNKNOWN (PROTEIN FOR MGC:3222).	Q9BTV4	100%	183	1382
HDTBD53	906342	695	WUblastx .64	(Q9BTV4) UNKNOWN (PROTEIN FOR MGC:3222).	Q9BTV4	99%	187	1386
HDTBP04	1307742	144	WUblastx .64	(Q9D5J3) 4930432K09RIK PROTEIN.	Q9D5J3	38%	70	720
HDTBP04	543618	696	WUblastx .64	(Q9D5J3) 4930432K09RIK PROTEIN.	Q9D5J3	38%	65	718
HDTDQ23	1306984	145	WUblastx .64	calcium-binding protein (clone pMP41) - mouse (fragment)	pir S04970 S04970	100%	1611	1709
HDTDQ23	879009	697	WUblastx .64	calcium-binding protein (clone pMP41) - mouse (fragment)	pir S04970 S04970	100%	1623	1721
HDTDQ23	751707	698	WUblastx .64	calcium-binding protein (clone pMP41) - mouse (fragment)	pir S04970 S04970	100%	1623	1721
HDTFE17	1043391	148	WUblastx	(Q9UJU8) JM24	Q9UJU8	100%	14	118

				.64	PROTEIN (FRAGMENT).		84%	955	1089
HDTFE17	874477	702		WUblastx .64	(Q8WYU2) Hypothetical 44.0 kDa protein.	Q8WYU2	100%	343	705
HDTFE17	892317	703		HMMER 2.1.1	PFAM: Transmembrane amino acid transporter protein	PF01490	86.4	116	481
				WUblastx .64	(Q8WYU2) Hypothetical 44.0 kDa protein.	Q8WYU2	100%	457	672
HDTIT10	839264	150		HMMER 2.1.1	PFAM: Phosphatidylethanolamine -binding protein	PF01161	97%	33	461
				WUblastx .64	(Q96DV4) Similar to RIKEN cDNA	Q96DV4	100%	463	621
HDTIT10	834697	704		WUblastx .64	(Q96DV4) Similar to RIKEN cDNA 4733401F03 gene.	Q96DV4	50.9		
				WUblastx .64	(Q96DV4) Similar to RIKEN cDNA 4733401F03 gene.	Q96DV4	100%	819	911
HDTMK50	1011485	151		WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	82%	352	858
HE2DY70	722217	152		WUblastx .64	(Q9BS33) SIMILAR TO HYPOTHETICAL PROTEIN FLJ11218.	Q9BS33	98%	343	903
HE2FV03	396139	155		WUblastx .64	(Q8WX31) BA382H24.3 (multiple PDZ domain protein) (Fragment).	Q8WX31	64%	1119	1045
HE2NV57	740750	156		WUblastx .64	(Q9UGV6) BK445C9.3 (HIGH-MOBILITY	Q9UGV6	72%	1351	1121
							100%	9	167
							73%	281	805
							31%	321	866
							66%	71	106

						GROUP (NONHISTONE CHROMOSOMAL) PROT								
HE2PD49	638617			157	WUblastx .64	(Q9BSR6) SIMILAR TO RIKEN CDNA 2410018G23 GENE.	Q9BSR6			100%		403		849
HE8DS15	847060			160	WUblastx .64	(Q9WVT0) SEVEN TRANSMEMBRANE RECEPTOR.	Q9WVT0			80%	1	48	270	146
										24%		269	985	
HE8MH91	589450			161	WUblastx .64	(Q9H8Z4) CDNA FLJ13121 FIS, CLONE NT2RP3002687.	Q9H8Z4			98%	9		410	
HE8QV67	1050076			162	WUblastx .64	(BAB55430) CDNA FLJ14978 fis, clone VESEN1000122.	BAB55430			100%		321	425	600
										31%		487	201	1684
										100%		1	729	1108
										96%		1403		
										96%		577		
										98%		800		
HE8QV67	1050077			707	WUblastx .64	(BAB55430) CDNA FLJ14978 fis, clone VESEN1000122.	BAB55430			100%		1500	1988	206
										86%	3	109	246	1455
										30%		1366	1500	
										99%		334		
HE9BK23	675382			163	HMMER 2.1.1	PFAM: Fibrinogen beta and gamma chains, C- terminal globular domain	PF00147			77.2		762	959	
					WUblastx .64	(Q9Y5C1) ANGIOPOIETIN 5.	Q9Y5C1			100%		958	1419	959
HE9DG49	1299935			165	WUblastx .64	(Q9NYL4) FK506 BINDING PROTEIN	Q9NYL4			92%		39	672	
										100%		70		

HE9DG49	658678	708	HMMER 2.1.1	PRECURSOR. PFAM: FKBP-type peptidyl-prolyl cis-trans isomerases	PF00254	91	211	492
			WUblastx .64	(Q9NYL4) FK506 BINDING PROTEIN PRECURSOR.	Q9NYL4	100%	70	672
HE9DG49	382000	709	HMMER 2.1.1	PFAM: FKBP-type peptidyl-prolyl cis-trans isomerases	PF00254	91	-71	-352
			WUblastx .64	(Q9NYL4) FK506 BINDING PROTEIN PRECURSOR.	Q9NYL4	100% 86%	578 78	679 674
HE9OW20	1352337	168	WUblastx .64	(CAC41349) Alpha2- glucosyltransferase.	CAC41349	95%	129	1151
HE9OW20	838598	710	WUblastx .64	(CAC41349) Alpha2- glucosyltransferase.	CAC41349	99%	142	996
HE9OW20	834400	711	WUblastx .64	(CAC41349) Alpha2- glucosyltransferase.	CAC41349	93% 95%	129 449	497 1051
HE9RM63	886167	169	WUblastx .64	(Q9NV86) CDNA FLJ10873 FIS, CLONE NT2RP4001730, WEAKLY SIMILAR TO UDP	Q9NV86	40% 94%	1995 82	2087 1113
HEAAR07	561524	170	WUblastx .64	probable transposase - human transposon MER37	pir S72481 S72481	57% 89% 75% 78% 33% 55%	691 1020 210 833 784 332	858 1076 332 1015 864 703

HEBCM63	484643	173	WUblastx .64	(Q9BYH1) SEZ6L.	Q9BYH1	91%	12	449
HEBEJ18	701802	174	WUblastx .64	(AAH00573) HSPC163 protein.	AAH00573	100%	51	467
HEEAG23	684254	175	HMMER 2.1.1	PFAM: emp24/gp25L/p24 family	PF01105	36.2	63	185
			WUblastx .64	(AAH23041) Similar to RIKEN cDNA 240003B06 gene.	AAH23041	100% 99%	114 406	185 780
HEEAJ02	633657	176	WUblastx .64	(Q9BW86) PHOSPHATIDYLETHA NOLAMINE N- METHYLTRANSFERAS E.	Q9BW86	80%	54	761
HEEAQ11	777843	177	HMMER 2.1.1	PFAM: Cystatin domain	PF00031	39.7	360	638
			WUblastx .64	(Q9H4G1) BA218C14.1 (NOVEL CYSTATIN FAMILY MEMBER).	Q9H4G1	100%	213	653
HEEBI05	1307611	178	WUblastx .64	(Q9N7S5) PROBABLE PROTEOPHOSPHOGLY CAN (FRAGMENT).	Q9N7S5	32%	252	635
HEEBI05	1047700	712	WUblastx .64	(Q9N7S5) PROBABLE PROTEOPHOSPHOGLY CAN (FRAGMENT).	Q9N7S5	32%	332	715
HEGAH43	532596	179	WUblastx .64	(Q9H1M5) BA530N10.1 (NOVEL PROTEIN).	Q9H1M5	100%	29	361
HEGAN94	885637	180	WUblastx .64	colipase precursor, pancreatic - dog	pir A46717 A46717	36%	148	393
HEGAN94	769649	713	HMMER	PFAM: Colipase	PF01114	24	229	405

			2.1.1		colipase precursor, pancreatic - dog	pir A46717 A46717	36%	229	474
HEGBS69	1048170	714	WUblastx .64		(Q9H056) HYPOTHETICAL 12.5 KDA PROTEIN.	Q9H056	100%	1125	778
HELGK31	681138	182	HMMER 2.1.1		PFAM: DHHC zinc finger domain	PF01529	95.1	659	820
			WUblastx .64		(Q9NPG8) CDNA FLJ10479 FIS, CLONE NT2RP2000120 (DC1) (HYPOTHETICAL 39	Q9NPG8	83%	209	1240
HELGK31	340352	715	HMMER 2.1.1		PFAM: DHHC zinc finger domain	PF01529	95.1	-82	-243
			WUblastx .64		(Q9NPG8) CDNA FLJ10479 FIS, CLONE NT2RP2000120 (DC1) (HYPOTHETICAL 39	Q9NPG8	98% 36% 100%	242 36 498	496 128 1274
HELHD85	847372	183	WUblastx .64		(Q9N083) UNNAMED PORTEIN PRODUCT.	Q9N083	52% 53% 67%	1715 1648 1881	1653 1559 1705
HELHL48	696945	184	HMMER 2.1.1		PFAM: DHHC zinc finger domain	PF01529	124.3	797	991
			WUblastx .64		hypothetical protein DKFZp761E1347.1 - human (fragment)	pir T47144 T47144	96%	359	1414
HELHL48	610025	716	HMMER 2.1.1		PFAM: DHHC zinc finger domain	PF01529	124.3	199	393
			WUblastx .64		hypothetical protein DKFZp761E1347.1 -	pir T47144 T47144	100% 98%	470 585	586 818

HEMAM41	741647	185	WUblastx .64	human (fragment) (Q8VDR1) Similar to RIKEN cDNA 2310044D20 gene.	Q8VDR1	90%	10	471
HEMAM41	419870	717	WUblastx .64	(Q8VDR1) Similar to RIKEN cDNA 2310044D20 gene.	Q8VDR1	83%	398	745
HEPAA46	596830	186	WUblastx .64	(Q96PH6) ESC42.	Q96PH6	100%	18	386
HESAJ10	526013	190	WUblastx .64	(Q8WWX9) Selenoprotein SelM.	Q8WWX9	96% 95% 64%	566 405 541	841 545 582
HETAB45	609827	191	WUblastx .64	(Q9NXH2) CDNA FLJ20254 FIS, CLONE COLF6926.	Q9NXH2	98% 99%	646 3	795 647
HETLM70	1177512	193	WUblastx .64	(AAH25323) Similar to hypothetical protein FLJ21240	AAH25323	99%	3	1022
HETLM70	1046327	719	WUblastx .64	(AAH25323) Similar to hypothetical protein FLJ21240	AAH25323	99%	3	1022
HETLM70	1046328	720	WUblastx .64	(AAH25323) Similar to hypothetical protein FLJ21240	AAH25323	98% 100%	101 2	256 46
HFABG18	847073	194	WUblastx .64	(Q9QZE9) TM6P1.	Q9QZE9	95% 88%	53 237	253 797
HFAMB72	490697	195	WUblastx .64	(Q9Y6F6) JAW1- RELATED PROTEIN MRV11A LONG ISOFORM.	Q9Y6F6	94% 69%	672 1	722 669

HFCCQ50	579993	197	HMMER 2.1.1	PFAM: Galactosyltransferase	PF01762	130.8	365	1042
			WUblastx .64	(Q9C0J1) BETA-1,3-N- ACETYLGALACTOSAMIN YLTRANSFERASE BGN-T4.	Q9C0J1	95%	35	1102
HFFAL36	560639	200	WUblastx .64	(O75525) T-STAR.	O75525	100%	568	657
HFGAD82	513669	201	WUblastx .64	membrane glycoprotein M6 - mouse	pir I78556 I78556	92%	249	410
HFIIZ70	1043350	202	WUblastx .64	(Q8W/WX9) Selenoprotein SelM.	Q8W/WX9	93% 86% 91% 98%	833 24 423 987	919 212 458 1145
HFIIZ70	906708	721	WUblastx .64	(Q8W/WX9) Selenoprotein SelM.	Q8W/WX9	98% 93% 98% 91%	1038 884 74 474	1196 970 241 509
HFKET18	889515	203	WUblastx .64	(Q9HAD8) CDNA FLJ11786 FIS, CLONE HEMBA1006036.	Q9HAD8	63% 54% 42% 66% 50%	1384 1230 1444 1390 1471	1485 1397 1533 1434 1533
HFKFG02	634743	204	WUblastx .64	ISOFORM OAT1.2 OF O95742	tr_vs O95742- 01 O95742	89% 100%	11 253	265 564
HFPX09	1309793	208	WUblastx .64	(O95970) LEUCINE- RICH GLIOMA- INACTIVATED PROTEIN PRECURSOR.	O95970	100%	161	1831
HFPX09	835390	722	HMMER	PFAM: Leucine rich	PF01463	46.3	741	890

				2.1.1	repeat C-terminal domain (O95970) LEUCINE- RICH GLIOMA- INACTIVATED PROTEIN PRECURSOR.	O95970		99%	225	1895
HFPCX09	598723	723		WUblastx .64	(O95970) LEUCINE- RICH GLIOMA- INACTIVATED PROTEIN PRECURSOR.	O95970		86% 94%	161 169	298 1830
HFPCX36	526635	209		WUblastx .64	(Q96NR6) CDNA FLJ30278 fis, clone BRACE2002755.	Q96NR6		56% 66%	680 450	775 680
HFTCU19	735139	211		WUblastx .64	(Q96B80) Similar to RIKEN cDNA 0610040E02 gene.	Q96B80		88%	20	802
HFTDL56	695976	212		HMMER 2.1.1	PFAM: Neurotransmitter- gated ion-channel	PF00065		769.9	168	1574
				WUblastx .64	(P04760) ACETYLCHOLINE RECEPTOR PROTEIN, GAMMA CHAIN PRECUR	ACHG_MOUSE		99%	93	1649
HFVAB79	1300736	214		WUblastx .64	(Q9BX93) GROUP XIII SECRETED PHOSPHOLIPASE A2.	Q9BX93		100%	133	714
HFVAB79	565076	725		WUblastx .64	(Q9BX93) GROUP XIII SECRETED PHOSPHOLIPASE A2.	Q9BX93		100%	139	720
HFXGT26	745381	220		WUblastx .64	(O95662) POT. ORF VI (FRAGMENT).	O95662		57%	162	689

HFXHK73	609826	223	WUblastx .64	(Q9H960) CDNA FLJ12988 FIS, CLONE NT2RP3000080.	Q9H960	58% 50%	1164 1749	1042 1714
HFXKJ03	505207	224	WUblastx .64	(O62658) LINE-1 ELEMENT ORF2.	O62658	34% 36%	492 920	292 525
HFXKT05	658690	225	WUblastx .64	(Q9H5H7) CDNA: FLJ23425 FIS, CLONE HEP22862.	Q9H5H7	81%	5	1015
HFXKY27	634161	226	WUblastx .64	(Q9P147) PRO2822.	Q9P147	86% 70%	812 928	768 815
HGBFO79	422794	227	WUblastx .64	(AAH06833) Similar to DKFZP586F1524 protein.	AAH06833	78% 96%	72 134	140 1147
HGBIB74	837220	229	WUblastx .64	hypothetical protein ZK858.6 - Caenorhabditis elegans	pir T28058 T28058	50% 51% 65% 62%	1387 2 482 723	1494 439 730 1403
HGBIB74	838602	727	WUblastx .64	(Q9V3N6) BG:DS00797.1 PROTEIN.	Q9V3N6	65% 82% 81% 27% 57%	736 537 1251 223 61	1257 740 1505 537 474
HGBIB74	899864	728	WUblastx .64	(Q9V3N6) BG:DS00797.1 PROTEIN.	Q9V3N6	71%	12	950
HHAAF20	838603	231	WUblastx .64	(AAH06738) Hypothetical 47.5 kDa protein.	AAH06738	85% 81%	540 245	728 580
HHBCS39	1003028	232	WUblastx .64	(Q9H763) CDNA: FLJ21269 FIS, CLONE COL01745.	Q9H763	98%	17	601

HHBCS39	883427	729	WUblastx .64	(Q9H763) CDNA: FLJ21269 FIS, CLONE COL01745.	Q9H763	98%	63	647
HHEAA08	638231	233	WUblastx .64	(Q9BVD9) UNKNOWN (PROTEIN FOR MGC:5149).	Q9BVD9	61% 74%	1923 2147	1870 1923
HHEMM74	941955	236	WUblastx .64	(Q96QU0) Calcium- promoted Ras inactivator.	Q96QU0	99%	1741	2046
HHEMM74	906815	732	WUblastx .64	(Q9HBS7) HYPOTHETICAL 14.2 KDA PROTEIN.	Q9HBS7	66% 64%	731 592	880 735
HHEMM74	902458	733	WUblastx .64	(Q96QU0) Calcium- promoted Ras inactivator.	Q96QU0	99% 89%	458 140	1681 253
HHEMM74	895682	734	WUblastx .64	(Q96QU0) Calcium- promoted Ras inactivator.	Q96QU0	83% 100%	316 287	477 316
HHEPM33	877639	239	WUblastx .64	(Q96BH1) Ring finger protein 25.	Q96BH1	97% 100%	10 1185	1230 1373
HHEPU04	838217	241	WUblastx .64	(Q9BQB6) UNKNOWN (PROTEIN FOR MGC:11276) (PROTEIN FOR IMAGE:3455200).	Q9BQB6	80%	259	747
HHEPU04	897457	735	blastx.2	(BC000828) Unknown (protein for IMAGE:3455200) [Homo sapiens]	gb AAH00828.1 AA H00828	80%	267	755
HHEPU04	535730	736	WUblastx .64	(Q9BQB6) UNKNOWN (PROTEIN FOR MGC:11276) (PROTEIN FOR IMAGE:3455200).	Q9BQB6	72% 83% 100%	326 217 45	424 339 218
HHFBY53	821330	242	WUblastx	(Q9LGZ9) GENOMIC	Q9LGZ9	100%	746	868

HHFEC49	905849	243	WUblastx .64	(Q9D1N2) 1110002J19RIK PROTEIN.	Q9D1N2		100%	745	867
HHFFJ48	634521	244	WUblastx .64	(Q9CWA7) 0610010F05RIK PROTEIN (FRAGMENT).	Q9CWA7		49%	1362	1598
HHFGR93	865581	245	WUblastx .64	(Q96AP7) Hypothetical 41.2 kDa protein.	Q96AP7		100%	132	1301
HHFGR93	691402	737	HMMER	PFAM: Immunoglobulin	PF00047		36.3	628	807

HHPGO40	129927	255	WUblastx .64	(Q9HBW1) Brain tumor associated protein NAG14.	Q9HBW1	74% 30%	191 338	976 928
HHPGO40	753270	741	HMMER 2.1.1	PFAM: Leucine Rich Repeat	PF00560	122	542	613
			WUblastx .64	(Q9HBW1) Brain tumor associated protein NAG14.	Q9HBW1	74% 30%	191 338	967 928
HHPGO40	560969	742	HMMER 2.1.1	PFAM: Leucine Rich Repeat	PF00560	77	548	619
			WUblastx .64	(Q9HBW1) Brain tumor associated protein NAG14.	Q9HBW1	71% 31% 74%	739 691 197	984 933 754
HILCF66	636025	258	WUblastx .64	(Q9CWZ1) 240006A19RIK PROTEIN.	Q9CWZ1	100% 96%	1435 1243	1530 1323
HJACG02	1307789	259	WUblastx .64	(Q9HD89) CYSTEINE- RICH SECRETED PROTEIN (C/EBP- EPSILON REGULATED MYEL	Q9HD89	100%	66	389
HJACG02	509948	743	WUblastx .64	(Q9HD89) CYSTEINE- RICH SECRETED PROTEIN (C/EBP- EPSILON REGULATED MYEL	Q9HD89	100%	47	370
HJACG30	895505	260	WUblastx .64	(Q9UM21) UDP- GLCNAC:A-1,3-D- MANNOSIDE B-1,4-N- ACETYLGLUCOSAMIN	Q9UM21	96%	291	389

HJACG30	774300	745	WUblastx .64	YLTRANS (Q9D399) 6330415B21RIK PROTEIN.	Q9D399	80%	220	297
HJBCU04	877643	261	WUblastx .64	(Q9Y3P8) SIT PROTEIN PRECURSOR.	Q9Y3P8	100%	36	623
HJBCY35	719729	262	WUblastx .64	hypothetical protein DKFZp586J0619.1 - human (fragment)	pir T08758 T08758	100%	1	1212
HJMBM38	545752	264	WUblastx .64	(Q9CS66) 5730496N17RIK PROTEIN (FRAGMENT).	Q9CS66	83%	3	722
HJPAD75	651337	267	WUblastx .64	(Q9H5F8) CDNA: FLJ23476 FIS, CLONE HSI14935.	Q9H5F8	98%	8	232
HJPCP42	852573	747	WUblastx .64	(Q9VL06) CG5604 PROTEIN.	Q9VL06	54%	19	315
HJPCP42	824612	748	WUblastx .64	cut1 protein - fission yeast (Schizosaccharomyces pombe)	pir A35694 A35694	42%	7	201
HKAAE44	564406	269	WUblastx .64	(Q969S6) Unknown (protein for MGC:15961) (protein for MGC:14327).	Q969S6	86%	113	520
HKAAH36	1352332	270	WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	100%	128	1006
HKAAH36	1352331	749	WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	71%	295	846
HKAAH36	1352330	750	WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	100%	182	1060

HKAAH36	836040	751	WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	90% 100%	184 399	348 1061
HKAAH36	838068	752	HMMER 2.1.1	PFAM: Trypsin	PF00089	270.2	452	1108
			WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	92%	254	1132
HKAAH36	815661	753	HMMER 2.1.1	PFAM: Trypsin	PF00089	270.2	327	983
			WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	100%	129	1007
HKAAH36	590734	754	WUblastx .64	(AAH08036) Kallikrein 5.	AAH08036	100% 86%	189 301	353 1065
HKAAK02	589945	271	HMMER 2.1.1	PFAM: Galactosyltransferase	PF01762	56.1	457	660
			WUblastx .64	(Q8WWR6) Beta 1,6- GlcNAc-transferase.	Q8WWR6	92%	97	681
HKABZ65	862030	273	WUblastx .64	(Q96LB9) Peptidoglycan recognition protein-I- alpha precursor.	Q96LB9	99% 45%	77 137	802 541
HKABZ65	665424	755	WUblastx .64	(Q96LB9) Peptidoglycan recognition protein-I- alpha precursor.	Q96LB9	99% 45%	69 129	794 533
HKACB56	554616	274	HMMER 2.1.1	PFAM: Kazal-type serine protease inhibitor domain	PF00050	76.3	114	266
			WUblastx .64	(P01001) ACROSIN INHIBITORS IIA AND IIB (BUSI-II).	IAC2_BOVIN	82%	96	266
HKACD58	1352202	275	WUblastx .64	(Q96BH2) Hypothetical 34.4 kDa protein.	Q96BH2	86% 28% 100%	786 46 125	1199 186 715

HKACD58	552465	756	WUblastx .64	(Q96BH2) Hypothetical 34.4 kDa protein.	Q96BH2	86%	795	1208
						28%	43	183
						88%	122	724
HKACM93	1352383	277	blastx.14	aqualysin (EC 3.4.21.-) I precursor - Thermus aquaticus	pir A35742 A35742	40%	884	1039
						41%	1097	1276
						30%	1274	1468
						50%	746	823
						34%	548	670
						53%	425	469
						58%	2201	2236
HKACM93	907085	758	WUblastx .64	aqualysin (EC 3.4.21.-) I precursor - Thermus aquaticus	pir A35742 A35742	42%	937	1071
						35%	521	919
HKACM93	906150	760	WUblastx .64	(P80146) EXTRACELLULAR SERINE PROTEINASE PRECURSOR (EC 3.4.	SEPR_THESR	39%	40	603
HKAEL80	570865	278	WUblastx .64	(O60448) NEURONAL THREAD PROTEIN AD7C-NTP.	O60448	63%	789	935
						68%	934	999
						65%	798	1052
HKAEV06	1352263	279	WUblastx .64	(Q9NVA4) CDNA FLJ10846 FIS, CLONE NT2RP4001373.	Q9NVA4	99%	501	1814
HKAEV06	638238	761	WUblastx .64	(Q9NVA4) CDNA FLJ10846 FIS, CLONE NT2RP4001373.	Q9NVA4	96%	367	459
						100%	197	367
						96%	480	1541
HKAFT66	545018	280	WUblastx .64	(BAB55101) CDNA FLJ14515 fis, clone NT2RM1000800, w	BAB55101	91%	18	371
						60%	130	537
HKAFT66	946512	281	WUblastx	(Q9CPS2)	Q9CPS2	72%	29	61

				.64	4933428103RIK PROTEIN.			64%	61	231
HKAFT66	889258	762		WUblastx .64	(Q9CPS2) 4933428103RIK PROTEIN.	Q9CPS2		84%	274	828
HKAFT66	904790	763		WUblastx .64	(Q9CPS2) 4933428103RIK PROTEIN.	Q9CPS2		72%	29	61
HKDBF34	833065	282		WUblastx .64	(Q9HBJ8) KIDNEY- SPECIFIC MEMBRANE PROTEIN NX-17.	Q9HBJ8		64%	61	231
HKDBF34	587268	764		WUblastx .64	(Q9HBJ8) KIDNEY- SPECIFIC MEMBRANE PROTEIN NX-17.	Q9HBJ8		83%	274	828
HKGAT94	762811	283		WUblastx .64	(Q9H919) CDNA FLJ13078 FIS, CLONE NT2RP3002002.	Q9H919		80%	298	555
HKGAT94	460631	765		WUblastx .64	(Q9H919) CDNA FLJ13078 FIS, CLONE NT2RP3002002.	Q9H919		84%	12	314
HKISB57	625956	285		WUblastx .64	(Q8WWW1) Smoothelin- B3.	Q8WWW1		88%	69	734
HKMLM11	514788	287		WUblastx .64	(Q9P059) HSPC323 (FRAGMENT).	Q9P059		100%	332	562
HKMLP68	1037919	288		WUblastx	(Q8VD01) Hypothetical	Q8VD01		98%	148	462
								27%	8	586
								26%		
								44%		
								71%		
								85%		
								49%		

HKMLP68	880047	767	.64	61.8 kDa protein. (Q8VD01) Hypothetical 61.8 kDa protein.	Q8VD01	49%	31	609
HKMND01	527402	290	WUblastx .64	(Q9H3C0) PRO0898.	Q9H3C0	83%	867	757
HL2AC08	610018	291	HMMER 2.1.1	PFAM: Thioredoxin	PF00085	82.8	145	444
			WUblastx .64	hypothetical protein DKFZp564E1962.1 - human (fragment)	pir T12471 T12471	100%	46	903
HLCND09	1172046	293	HMMER 2.1.1	PFAM: PAP2 superfamily	PF01569	20.3	170	352
			WUblastx .64	(Q9H929) CDNA FLJ13055 FIS, CLONE NT2RP3001538, WEAKLY SIMILAR TO HYP	Q9H929	88%	107	421
HLCND09	1035153	769	HMMER 2.1.1	PFAM: PAP2 superfamily	PF01569	20.4	62	244
			WUblastx .64	(Q9H929) CDNA FLJ13055 FIS, CLONE NT2RP3001538, WEAKLY SIMILAR TO HYP	Q9H929	97%	2	274
HLDBE54	836041	294	WUblastx .64	(Q9NR71) MITOCHONDRIAL CERAMIDASE.	Q9NR71	98%	212	1051
HLDBE54	600362	770	WUblastx .64	(Q9JHE3) NERUTAL CERAMIDASE (NEUTRAL	Q9JHE3	45% 72% 78%	332 130 375	397 306 1028

HLD BE54	800678	771	HMMER 2.1.1	CERAMIDASE).	PF01244	466.8	352	1410
			WUblastx .64	(Q9H4A9) PUTATIVE DIPEPTIDASE.	Q9H4A9	100%	133	1590
HLD BX13	815665	295	WUblastx .64	(Q9H387) PRO2550.	Q9H387	76% 60%	1764 1815	1681 1756
HLD NA86	1352197	296	WUblastx .64	(Q9BQB6) UNKNOWN (PROTEIN FOR MGC:11276) (PROTEIN FOR IMAGE:3455200).	Q9BQB6	100%	238	726
HLD NA86	535730	772	WUblastx .64	(Q9BQB6) UNKNOWN (PROTEIN FOR MGC:11276) (PROTEIN FOR IMAGE:3455200).	Q9BQB6	72% 83% 100%	326 217 45	424 339 218
HLD OW79	847396	298	WUblastx .64	(AAH24441) Hypothetical 37.8 kDa protein.	AAH24441	83%	10	699
HLD QC46	847397	299	WUblastx .64	(Q9BXJ8) TRANSMEMBRANE PROTEIN INDUCED BY TUMOR NECROSIS FACTOR ALPHA	Q9BXJ8	100%	28	423
HLD QR62	753742	300	WUblastx .64	(Q9NQW2) PROGRESSIVE ANKYLOSIS-LIKE PROTEIN.	Q9NQW2	100% 99%	41 376	382 1002
HLD QU79	740755	301	WUblastx .64	(O75477) KE04P.	O75477	100%	105	1142
HLD RM43	846330	302	WUblastx	(Q96NZ9) Proline-rich	Q96NZ9	100%	24	476

HLDRM43	638939	773	.64	acidic protein. (Q96NZ9) Proline-rich acidic protein.	Q96NZ9	100%	164	616
HLDRP33	647430	303	WUblastx .64	(Q9H743) CDNA: FLJ21394 FIS, CLONE COL03536.	Q9H743	38% 64%	340 599	278 489
HLHFP03	460467	304	WUblastx .64	(Q9WVC2) LY- 6/NEUROTOXIN HOMOLOG (ADULT MALE HIPPOCAMPUS CDNA, RIKEN	Q9WVC2	81%	224	571
HLHFR58	894001	776	WUblastx .64	macrophage inflammatory protein 1-beta precursor [validated] - human	pir JH0319 A31767	100%	610	335
HLICQ90	791828	307	WUblastx .64	(Q96N65) CDNA FLJ31349 fis, clone MESAN2000092, moderately similar to	Q96N65	95% 93%	571 59	636 616
HLQBE09	520375	309	WUblastx .64	second peroxisomal thioesterase - human	pir JC7367 JC7367	56%	8	559
HLQDR48	1307726	310	WUblastx .64	(Q9NQZ1) HEPATOCELLULAR CARCINOMA ASSOCIATED PROTEIN TD26.	Q9NQZ1	86%	296	406
HLQDR48	619979	777	WUblastx .64	(AAH24408) Hypothetical 20.3 kDa protein (Fragment)	AAH24408	65% 100%	54 675	572 701
HLTAU74	853614	311	WUblastx .64	(Q8WU84) Hypothetical 113.9 kDa protein	Q8WU84	77% 100%	6 657	704 803

HLTEJ06	543017	314	WUblastx .64	(Fragment). (AAL78047) Envelope protein.	AAL78047	32%	173	490
HLTHG37	787530	316	WUblastx .64	(AAH01258) N- acetylglucosamine- phosphate mutase.	AAH01258	100% 93%	960 2	1070 955
HLTHG37	743169	778	WUblastx .64	(Q9NTT5) DJ202D23.2 (NOVEL PROTEIN) (FRAGMENT).	Q9NTT5	100%	640	335
HLWAA17	629552	317	WUblastx .64	(Q9NY26) IRT1 PROTEIN (SIMILAR TO ZINC/IRON REGULATED TRANSPORTER-LIK	Q9NY26	94% 100%	226 85	960 123
HLWAA88	588485	318	WUblastx .64	(Q9H8L6) CDNA FLJ13465 FIS, CLONE PLACE1003493, WEAKLY SIMILAR TO END	Q9H8L6	99% 99% 40% 42% 92%	683 295 781 440 35	1768 696 855 517 322
HLWAA88	769166	779	WUblastx .64	(Q9H8L6) CDNA FLJ13465 FIS, CLONE PLACE1003493, WEAKLY SIMILAR TO END	Q9H8L6	95% 93% 98%	1567 1487 51	1629 1573 1493
HLWAD77	653513	319	WUblastx .64	(Q9GZP9) F-LAN-1 (HYPOTHETICAL TRANSMEMBRANE PROTEIN SBBIS3).	Q9GZP9	99%	29	745
HLWAE11	783071	320	HMMER 2.1.1	PFAM: Clq domain	PF00386	44.4	403	789

				WUblastx .64	(Q9BXI9) COMPLEMENT-C1Q TUMOR NECROSIS FACTOR-RELATED PROTEIN.	Q9BXI9	99%	28	861
HLWAO22	587270	321		WUblastx .64	(Q9NRG9) GL003 (ADRACALIN) (AAAS PROTEIN) (UNKNOWN) (PROTEIN FOR MGC:	Q9NRG9	78% 28% 97% 100% 83% 30% 41% 28% 26% 58%	449 139 1003 14 19 396 503 100 470 333	1147 420 1263 40 495 596 664 408 859 503
HLWAY54	658702	322		WUblastx .64	(Q9BY87) PROACROSIN BINDING PROTEIN SP32 PRECURSOR.	Q9BY87	99% 79% 100% 42% 23% 37% 90%	38 997 1448 563 1445 1260 1251	1006 1326 1663 643 1594 1331 1475
HLWBH18	1045194	323		WUblastx .64	(Q96MM0) CDNA FLJ32172 fis, clone PLACE6000555.	Q96MM0	69%	594	722
HLWBK05	765310	325		WUblastx .64	(Q9CUS9) 4833416I09RIK PROTEIN (FRAGMENT).	Q9CUS9	84%	10	1173
HLWBY76	797609	326		WUblastx .64	(AAH06651) Similar to hypothetical protein	AAH06651	76%	6	1127

HL YAN59	553507	781	WUblastx .64	FLJ23153 (AAL79706) Hypothetical 9.4 kDa protein.	AAL79706	85% 93% 82%	624 639 617	719 728 721
HL YAZ61	1352163	332	WUblastx .64	(O14626) PROBABLE G PROTEIN-COUPLED RECEPTOR H963.	H963_HUMAN	100%	1	855
HL YAZ61	423998	782	HMMER 2.1.1	PFAM: 7 transmembrane receptor (rhodopsin family)	PF00001	71.8	280	-283
			WUblastx .64	(O14626) PROBABLE G PROTEIN-COUPLED RECEPTOR H963.	H963_HUMAN	98%	1	846
HL YES38	638042	334	WUblastx .64	(O95662) POT. ORF VI (FRAGMENT).	O95662	81% 72% 72% 75% 33%	743 281 306 466 145	856 313 524 735 243
HM ADS41	596831	335	WUblastx .64	(AAH07725) Ceroid- lipofuscinosis, neuronal 8 (epile	AAH07725	92% 100%	186 427	449 1041
HM ADU73	1352177	336	WUblastx .64	(Q9EPE8) LOW- DENSITY LIPOPROTEIN RECEPTOR-RELATED PROTEIN 9.	Q9EPE8	87%	491	2626
HM ADU73	467053	783	WUblastx .64	(Q9EPE8) LOW- DENSITY LIPOPROTEIN RECEPTOR-RELATED	Q9EPE8	78%	115	294

HMAMI15	1352406	337	WUblastx .64	PROTEIN 9. (AAL84703) Citrate lyase beta subunit.	AAL84703	99%	4	1023
HMAMI15	1049263	784	WUblastx .64	(AAL84703) Citrate lyase beta subunit.	AAL84703	100% 79%	3 372	440 920
HMDAE65	520338	338	WUblastx .64	(Q9NLE3) PROBABLE (HHV-6) U1102, VARIANT A DNA, COMPLETE VIRION GENOM	Q9NLE3	79% 70% 63% 64% 67%	335 342 333 330 333	249 250 235 235 250
HMDAM24	514394	339	WUblastx .64	hypothetical protein DKFZp434N0615.1 - human (fragment)	pir T42663 T42663	92% 45% 33% 31% 52% 26% 25% 31% 67%	155 298 248 345 877 369 158 318 306	325 363 316 962 984 764 298 818 926
HMEAI48	1352290	341	WUblastx .64	(Q9Y639) STROMAL CELL-DERIVED RECEPTOR-1 ALPHA.	Q9Y639	80%	36	158
HMECK83	636035	342	WUblastx .64	(O62658) LINE-1 ELEMENT ORF2.	O62658	32% 50% 49%	668 65 483	483 6 100
HMEET96	566720	343	WUblastx .64	(Q9CR48) 2610318G18RIK PROTEIN.	Q9CR48	86%	121	915
HMIAL37	603201	344	HMMER 2.1.1	PFAM: PDZ domain (Also known as DHR or	PF00595	57.7	127	327

					WUblastx .64	GLGF), (Q9Y6N9) ANTIGEN NY-CO-38.	Q9Y6N9		100% 100% 38% 27% 35% 62% 63%	315 76 109 870 765 1111 1067	1100 315 318 1061 998 1242 1132
HMIAP86	726831	345			HMMER 2.1.1	PFAM: Mitochondrial carrier proteins (AAG29582)	PF00153		262	329	1180
					WUblastx .64	Mitochondrial uncoupling protein 5 long	AAG29582		97%	182	1183
HMMAH60	562776	347			WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728		52% 53%	675 820	538 665
HMSBX80	597448	349			WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728		55%	1721	1413
HMSGB14	570833	351			WUblastx .64	(Q9BGV8) HYPOTHETICAL 10.0 KDA PROTEIN.	Q9BGV8		73%	403	615
HMSGT42	383470	352			WUblastx .64	(Q9GZW0) DJ604K5.1 (15 KDA SELENOPROTEIN).	Q9GZW0		99%	40	525
HMSHS36	1127691	354			WUblastx .64	(O95662) POT. ORF VI (FRAGMENT).	O95662		83%	781	350
HMSHS36	1028961	786			WUblastx .64	(Q9H8K5) CDNA FLJ13501 FIS, CLONE PLACE1004815.	Q9H8K5		64% 78% 79%	494 340 367	544 381 489

HMSKC04	799540	357	WUblastx .64	(Q9H743) CDNA: FLJ21394 FIS, CLONE COL03536.	Q9H743	66%	1341	1225
						60%	1414	1346
						56%	1244	1053
HMTBI36	1301451	358	WUblastx .64	(Q9VZF8) CG1332 PROTEIN.	Q9VZF8	56%	958	2556
						36%	2488	3024
						40%	376	879
						35%	2341	2550
						27%	2494	2622
						40%	712	834
HMTBI36	866466	787	HMMER 2.1.1	PFAM: WD domain, G- beta repeat	PF00400	45.8	2490	2600
			WUblastx .64	(Q9VZF8) CG1332 PROTEIN.	Q9VZF8	56%	957	2555
						36%	2487	3023
						40%	375	878
						35%	2340	2549
						27%	2493	2621
						40%	711	833
HMUAP70	872208	359	WUblastx .64	(Q9EQH8) NEDD4 WW DOMAIN-BINDING PROTEIN 5 (FRAGMENT).	Q9EQH8	89%	69	845
HMUAP70	723302	788	WUblastx .64	(Q9BT67) UNKNOWN (PROTEIN FOR MGC:10924).	Q9BT67	73%	60	104
						99%	107	721
HMUAP70	778820	789	WUblastx .64	(Q9BT67) UNKNOWN (PROTEIN FOR MGC:10924).	Q9BT67	100%	183	221
						72%	229	402
						100%	338	844
HMUAP70	674913	790	WUblastx .64	(Q9BT67) UNKNOWN (PROTEIN FOR MGC:10924).	Q9BT67	98%	209	379
						94%	109	216
						82%	62	112

HMUAP70	646810	791	WUblastx .64	(Q9BT67) UNKNOWN (PROTEIN FOR MGC:10924).	Q9BT67	73% 96%	60 107	104 583
HMUAP70	381964	792	WUblastx .64	(Q9BT67) UNKNOWN (PROTEIN FOR MGC:10924).	Q9BT67	86% 99%	60 106	104 720
HMWEB02	638159	361	WUblastx .64	(Q96MX0) CDNA FLJ31762 fis, clone NT2RI2007754, weakly similar to INT	Q96MX0	100% 34% 97%	61 187 333	207 300 449
HMWFO02	542061	793	WUblastx .64	(Q9PIC6) PRO2738.	Q9PIC6	61% 44%	647 473	549 345
HMWGY65	1308287	363	WUblastx .64	(Q8VCP9) RIKEN cDNA 1200003C23 gene.	Q8VCP9	66%	42	1442
HMWGY65	794987	794	WUblastx .64	(Q8VCP9) RIKEN cDNA 1200003C23 gene.	Q8VCP9	58% 65%	542 42	1438 596
HNEEB45	1036397	365	WUblastx .64	hypothetical protein 3 - human	pir E41925 E41925	78% 39% 44%	861 523 548	929 717 862
HNFFC43	753337	366	WUblastx .64	(Q969J4) Lipocalin-1 interacting membrane receptor (Lipocalin- interac	Q969J4	97% 66% 87% 99%	319 428 651 903	453 769 839 1517
HNFJU96	460611	367	WUblastx .64	(Q26195) PVA1 GENE.	Q26195	66% 54% 61%	331 177 318	366 323 371
HNFJF07	577013	368	WUblastx .64	(Q8WYX2) Hypothetical 14.1 kDa protein.	Q8WYX2	65%	585	457
HNFJH45	410107	369	WUblastx .64	(Q9H7Z0) CDNA FLJ14058 FIS, CLONE	Q9H7Z0	48%	277	11

HNGAK47	561488	370		WUblastx .64	HEMBB1000554. (Q96EF8) Unknown (protein for MGC:21495).	Q96EF8		33% 31% 20% 34% 25% 39% 29%	12 12 492 492 486 190 537	206 206 617 557 569 2 487
HNGEP09	499076	378		WUblastx .64	(AAK55521) PRO0764.	AAK55521		57% 53% 50%	965 1021 867	861 977 715
HNGIJ31	519120	381		WUblastx .64	(Q9N083) UNNAMED PORTEIN PRODUCT.	Q9N083		73% 54% 66%	566 615 454	610 725 561
HNGJE50	561568	383		WUblastx .64	(Q9HBS7) HYPOTHETICAL 14.2 KDA PROTEIN.	Q9HBS7		64% 62%	1028 919	945 734
HNGJP69	604891	385		WUblastx .64	(Q9H743) CDNA: FLJ21394 FIS, CLONE COL03536.	Q9H743		53% 71%	973 860	857 693
HNGKN89	834857	387		WUblastx .64	(Q9BGZ4) HYPOTHETICAL 11.6 KDA PROTEIN.	Q9BGZ4		67%	891	781
HNGOM56	836064	388		WUblastx .64	(Q96MM0) CDNA FLJ32172 fis, clone PLACE6000555.	Q96MM0		38% 58%	577 714	744 953
HNHFO29	463568	399		WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KAIA0536.	Q9NX85		69%	522	695
HNHOD46	843488	402		WUblastx	(O60448) NEURONAL	O60448		76%	334	552

HNTBI57	570877	405	.64	THREAD PROTEIN AD7C-NTP.		56% 56% 52% 73% 59% 50% 70% 48% 50% 35% 31% 50% 61%	646 645 844 331 353 828 721 781 558 401 283 379 486	921 713 894 498 625 917 792 915 791 595 552 462 839
				(O95400) CD2 CYTOPLASMIC DOMAIN BINDING PROTEIN (CD2 ANTIGEN (CYTOPLA	O95400	100%	173	1195
HNTCE26	1160395	406	HMMER 2.1.1	PFAM: 7 transmembrane receptor (rhodopsin family)	PF00001	137.5	282	1037
			WUblastx .64	(Q9H1Y3) DJ317G22.2 (ENCEPHALOPSIN) (PANOPSIN).	Q9H1Y3	100%	111	1316
HNTCE26	853373	802	HMMER 2.1.1	PFAM: 7 transmembrane receptor (rhodopsin family)	PF00001	23.2	63	218
			WUblastx .64	(Q9H1Y3) DJ317G22.2 (ENCEPHALOPSIN) (PANOPSIN).	Q9H1Y3	95% 100%	370 12	495 377
HNTNC20	700627	407	WUblastx	(AAH24118) Similar to	AAH24118	57%	252	776

HODDN65	520348	414	.64	WUblastx .64	(Q9N083) UNNAMED PORTEIN PRODUCT.	Q9N083	77%	589	419
HODDN92	422913	415	.64	WUblastx .64	(Q9H1S5) BA110H4.2 (SIMILAR TO MEMBRANE PROTEIN).	Q9H1S5	100%	1119	1021
HODDO08	790333	416	.64	WUblastx .64	(Q8WZ36) Hypothetical 11.9 kDa protein.	Q8WZ36	83%	725	1042
HODDW40	579256	417	.64	WUblastx .64	(Q9GMP5) HYPOTHETICAL 6.6 KDA PROTEIN.	Q9GMP5	60%	657	520
HODGE68	834907	420	.64	WUblastx .64	retrovirus-related hypothetical protein II - human 1	pir S23650 S23650	36% 54%	370 276	278 1
HOEBK34	768325	421	HMMER 2.1.1	WUblastx .64	PFAM: von Willebrand factor type C domain (O94769) EXTRACELLULAR MATRIX PROTEIN.	PF00093	54.1	455	619
HOEBK34	509951	807	WUblastx .64	WUblastx .64	(O94769) EXTRACELLULAR MATRIX PROTEIN.	O94769	90%	149	643
HOEBZ89	828177	422	WUblastx .64	WUblastx .64	(O94769) EXTRACELLULAR MATRIX PROTEIN.	O94769	96% 93%	68 316	325 561
HOEDB32	634994	423	WUblastx .64	WUblastx .64	hypothetical protein C05G5.5 - Caenorhabditis elegans (Q9Y2Y6) TADA1 PROTEIN (DKFZP564K1964 PROTEIN).	pir T18967 T18967	31%	133	969
HOEDB32	634994	423	WUblastx .64	WUblastx .64	(Q9Y2Y6) TADA1 PROTEIN (DKFZP564K1964 PROTEIN).	Q9Y2Y6	100%	104	781

HOEDE28	1036480	424	WUblastx .64	(Q8WY86) PP3686.	Q8WY86	99%	933	1535
HOEDH84	748236	425	WUblastx .64	(Q960D8) SD05564p.	Q960D8	39%	7	1449
HOEFV61	833079	426	HMMER 2.1.1	PFAM: Leucine Rich Repeat	PF00560	22	142	216
			WUblastx .64	(Q9C000) NAC-BETA SPLICE VARIANT.	Q9C000	97%	695	1507
						94%	1496	1969
						36%	1163	1300
						100%	10	555
						57%	1419	1460
						29%	303	434
						100%	1945	2001
						44%	127	489
						34%	555	659
						30%	206	505
						29%	54	383
						30%	109	546
						96%	549	704
HOFMQ33	1184465	427	WUblastx .64	(O15232) MATRILIN-3 PRECURSOR.	MTN3_HUMAN	85%	43	1500
HOFMQ33	919896	809	HMMER 2.1.1	PFAM: von Willebrand factor type A domain	PF00092	189.8	288	815
			WUblastx .64	(O15232) MATRILIN-3 PRECURSOR.	MTN3_HUMAN	85%	42	1499
HOFMQ33	906694	810	HMMER 2.1.1	PFAM: von Willebrand factor type A domain	PF00092	162.2	318	737
			WUblastx .64	(O15232) MATRILIN-3 PRECURSOR.	MTN3_HUMAN	81%	72	857
HOFMQ33	902639	811	WUblastx	(O15232) MATRILIN-3	MTN3_HUMAN	81%	1584	877

HOFMQ33	702186	812	.64	PRECUSOR. (Q8WUF2) Hypothetical 23.7 kDa protein.	Q8WUF2	88% 99%	937 914	911 327
HOFMT75	911180	428	HMMER 2.1.1	PFAM: Eukaryotic aspartyl protease	PF00026	619	290	1303
			WUblastx .64	cathepsin D (EC 3.4.23.5) precursor [validated] - human	pir A25771 KHHUD	87%	83	1312
HOFMT75	905365	813	WUblastx .64	cathepsin D (EC 3.4.23.5) precursor [validated] - human	pir A25771 KHHUD	65%	83	361
HOFMT75	892308	814	WUblastx .64	cathepsin D (EC 3.4.23.5) precursor [validated] - human	pir A25771 KHHUD	88%	1494	757
HOFMT75	892291	815	HMMER 2.1.1	PFAM: Eukaryotic aspartyl protease	PF00026	496.2	336	1232
			WUblastx .64	cathepsin D (EC 3.4.23.5) precursor [validated] - human	pir A25771 KHHUD	99%	129	1232
HOFND85	847424	430	HMMER 2.1.1	PFAM: Cadherin domain	PF00028	256	905	1180
			WUblastx .64	(AAK51617) Protocadherin-beta7.	AAK51617	83% 30%	167 425	2047 1858
HOFOC33	1186156	432	WUblastx .64	clusterin precursor - dog	pir A40018 A40018	69% 81%	1022 115	1414 1086
HOFOC33	967554	817	HMMER 2.1.1	PFAM: Clusterin	PF01093	236.4	81	395
			WUblastx .64	clusterin precursor - dog	pir A40018 A40018	44% 91%	373 81	453 395
HOFOC33	878690	818	HMMER	PFAM: Clusterin	PF01093	236.6	81	395

				2.1.1	clusterin precursor - dog	pir/A40018/A40018				
				WUblastx .64				44%	373	453
								91%	81	395
HOFOC33	905734	819		HMMER 2.1.1	PFAM: Clusterin	PF01093		301.2	76	432
				WUblastx .64	clusterin precursor - dog	pir/A40018/A40018		77%	1023	1415
								95%	76	432
								86%	440	1087
HOFOC33	902326	820		WUblastx .64	clusterin precursor - dog	pir/A40018/A40018		84%	583	257
HOFOC33	885140	821		WUblastx .64	clusterin precursor - dog	pir/A40018/A40018		77%	839	36
HOFOC33	806819	822		HMMER 2.1.1	PFAM: 60s Acidic ribosomal protein	PF00428		74.6	-422	-733
				WUblastx .64	acidic ribosomal protein P0, cytosolic [validated] - human	pir/A27125/R5HUP0		52%	5	55
								87%	42	812
HOFOC73	931871	433		HMMER 2.1.1	PFAM: Papain family cysteine protease	PF00112		22.3	192	311
				WUblastx .64	(BAB22302) Adult male kidney cDNA, RIKEN full-length	BAB22302		87%	316	918
								70%	18	341
HOFOC73	907073	823		WUblastx .64	(CAC09370) DJ543J19.3 (cathepsin Z).	CAC09370		76%	64	414
								84%	411	920
HOFOC73	878863	825		WUblastx .64	(BAB55004) CDNA FLJ14357 fis, clone HEMBA1000005, h	BAB55004		100%	2291	819
HOGAW62	579891	434		WUblastx .64	(Q8WUD4) Similar to RIKEN cDNA 2700094L05 gene.	Q8WUD4		100%	35	130

HOGCK20	745445	435	WUblastx .64	(Q969N2) Phosphatidyl inositol glycan class T precursor (Hypothetical protein).	Q969N2	99% 97%	378 57	1622 389
HOGCK20	664499	826	WUblastx .64	(Q969N2) Phosphatidyl inositol glycan class T precursor (Hypothetical protein).	Q969N2	92% 97% 44% 50% 99%	1533 68 51 52 371	1616 382 125 81 1534
HOGCK63	895880	436	WUblastx .64	(Q9Y386) CGI-78 PROTEIN.	Q9Y386	76% 88% 100%	1214 1161 514	1264 1214 1161
HOGCK63	902295	827	WUblastx .64	(Q96BI3) Hypothetical 29.0 kDa protein (CGI-78 protein).	Q96BI3	100% 96%	813 22	872 477
HOGCS2	919898	437	WUblastx .64	(Q9NY68) CTL2 PROTEIN.	Q9NY68	99%	31	1383
HOGCS2	907118	828	WUblastx .64	(Q9NY68) CTL2 PROTEIN.	Q9NY68	99%	36	1388
HOGCS2	867965	829	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	59% 74%	1017 931	952 719
HOHBB49	833080	438	WUblastx .64	(Q9UI50) PRO0657 (FRAGMENT).	Q9UI50	71% 60%	2294 2374	2356 2493
HOHBC68	603968	439	WUblastx .64	(Q8WUJ3) Hypothetical 110.4 kDa protein.	Q8WUJ3	94% 97%	348 676	707 1785
HOHBY44	873264	441	WUblastx .64	(O60565) GREMLIN (DRM).	O60565	100%	170	721
HOHCH55	827481	443	WUblastx .64	(O95965) TEN INTEGRIN EGF-LIKE REPEAT DOMAINS	O95965	100%	221	1702

HOCH55	815682	832	WUblastx .64	PROTEIN PRECURSOR. (O95965) TEN INTEGRIN EGF-LIKE REPEAT DOMAINS PROTEIN PRECURSOR.	O95965	100% 31% 99% 40%	1623 416 230 326	1712 1576 1621 1426
HONAH29	1299928	444	WUblastx .64	(Q9NWM8) CDNA FLJ20731 FIS, CLONE HEP10272 (HYPOTHETICAL 24.2 KDA PRO	Q9NWM8	100%	136	768
HONAH29	457167	833	HMMER 2.1.1	PFAM: FKBP-type peptidyl-prolyl cis-trans isomerases	PF00254	95.1	288	539
			WUblastx .64	(Q9NWM8) CDNA FLJ20731 FIS, CLONE HEP10272 (HYPOTHETICAL 24.2 KDA PRO	Q9NWM8	98%	144	776
HOSDJ25	854234	445	WUblastx .64	(Q9D8Y9) 1810018L05RIK PROTEIN.	Q9D8Y9	85% 86%	468 143	593 544
HOSEG51	545809	446	WUblastx .64	(Q9NUT5) CDNA FLJ11152 FIS, CLONE PLACE1006901 (FRAGMENT).	Q9NUT5	51% 100%	2 46	82 537
HOSFD58	614040	447	HMMER 2.1.1	PFAM: ATP-sulphurylase	PF01747	697.3	-647	-1633
			WUblastx .64	3'-phosphoadenosine-5'- phosphosulfate synthetase - human	pir JW0087 JW0087	100%	56	1927

HOSFD58	383513	835	WUblastx .64	3'-phosphoadenosine-5'- phosphosulfate synthetase - human	pir JW0087 JW0087	100%	56	1927
HOUQC17	429229	448	HMMER 2.1.1	PFAM: Reprolysin family propeptide	PF01562	76.2	216	-20
			WUblastx .64	(P97857) ADAM-TS 1 PRECURSOR (EC 3.4.24.-) (A DISINTEGRIN A	ATS1_MOUSE	81%	508	3408
HOUDK26	565393	449	WUblastx .64	(Q9NUX1) CDNA FLJ11082 FIS, CLONE PLACE1005206.	Q9NUX1	87%	4	585
HPASA81	1352382	451	WUblastx .64	(O35360) UTERUS- OVARY SPECIFIC PUTATIVE TRANSMEMBRANE PROTEIN.	O35360	73%	1	1818
HPASA81	900548	836	HMMER 2.1.1	PFAM: CUB domain	PF00431	146.9	452	778
			WUblastx .64	(O35360) UTERUS- OVARY SPECIFIC PUTATIVE TRANSMEMBRANE PROTEIN.	O35360	67% 75%	8 918	928 1814
HPBCU51	411080	452	WUblastx .64	(Q9BWJ9) SIMILAR TO NEUROBLASTOMA (NERVE TISSUE) PROTEIN.	Q9BWJ9	96%	56	154
HPFCL43	535710	457	WUblastx .64	(AAH07349) Adrenal gland protein AD-004.	AAH07349	97%	57	257

HPRBC80	829136	470	HMMER 2.1.1	MYC. PFAM: Protein phosphatase 2C	PF00481	100%	3	200
			WUblastx .64	(Q9HAY8) SER/THR PROTEIN PHOSPHATASE TYPE 2C BETA 2 ISOFORM (PROTEIN)	Q9HAY8	99%	94	1254
HPRBC80	720095	851	WUblastx .64	(Q9HAY8) SER/THR PROTEIN PHOSPHATASE TYPE 2C BETA 2 ISOFORM (PROTEIN)	Q9HAY8	98%	3	284
HPRBF19	753282	471	WUblastx .64	(Q9H8I7) CDNA FLJ13593 FIS, CLONE PLACE1009493.	Q9H8I7	99%	15	632
HPTVX32	634353	473	WUblastx .64	(BAB84985) FLJ00232 protein (Fragment).	BAB84985	96%	103	543
HPWDJ42	722246	476	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	64% 67%	1100 1332	1026 1102
HPWDJ42	709662	854	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	64% 67%	1100 1332	1026 1102
HPZAB47	585702	477	WUblastx .64	hypothetical protein 3 - human	pir E41925 E41925	34% 55%	1132 1296	884 1183
HRAAB15	658717	478	WUblastx .64	(AAH25678) Similar to putative.	AAH25678	100%	11	511
HRABA80	882176	479	WUblastx .64	(Q9HA75) CDNA FLJ12122 FIS, CLONE	Q9HA75	63% 48%	647 144	679 371

HRABA80	588460	856	WUblastx .64	MAMMA1000129. (Q9HA75) CDNA FLJ12122 FIS, CLONE MAMMA1000129.	Q9HA75	93%	247	507
HRACD15	871221	480	WUblastx .64	(AAH08084) Hypothetical 50.4 kDa protein.	AAH08084	98%	1452	253
HRACD15	706332	857	WUblastx .64	(AAH08084) Hypothetical 50.4 kDa protein.	AAH08084	82% 98%	1649 1596	1581 253
HRACD80	1309774	481	WUblastx .64	(CAC37630) Fibulin-6 (Fragment).	CAC37630	44% 36% 45% 42% 47%	700 37 1282 1291 1291	1866 1446 1920 1584 1530
HRACD80	882163	858	HMME 2.1.1	PFAM: EGF-like domain	PF00008	64.3	1337	1441
			WUblastx .64	(CAC37630) Fibulin-6 (Fragment).	CAC37630	44% 37% 45% 42% 47%	695 32 1277 1286 1286	1861 1441 1915 1579 1525
HRDDV47	637650	482	WUblastx .64	(Q9VXD6) CG9723 PROTEIN.	Q9VXD6	27%	224	964
HRDFD27	567004	483	WUblastx .64	(Q9N032) UNNAMED PROTEIN PRODUCT.	Q9N032	47%	679	476
HROAJ03	567005	484	WUblastx .64	(Q96A82) CDNA FLJ30106 fis, clone BNGH41000190, weakly similar to Rat	Q96A82	88%	7	786

HSATR82	531973	486	WUblastx .64	(Q9UI58) PRO0483 PROTEIN.	Q9UI58	80%	678	707
HSAL82	490879	488	WUblastx .64	(Q9BE22) HYPOTHETICAL 13.4 KDA PROTEIN.	Q9BE22	76%	605	682
HSAPH65	545459	489	WUblastx .64	(Q9CZR4) 270018N07RIK PROTEIN.	Q9CZR4	63%	546	701
HSAPK10	561435	490	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	92%	23	403
HSAPD74	460527	491	WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KAIA0536.	Q9NX85	70%	1055	933
HSAPZ41	580872	492	WUblastx .64	(Q9H387) PRO2550.	Q9H387	63%	1218	1030
HSAXA83	545051	493	WUblastx .64	(Q9NRX6) PROTEIN X 013.	Q9NRX6	67%	967	674
HSAYB43	604143	494	WUblastx .64	(Q9N083) UNNAMED PORTEIN PRODUCT.	Q9N083	81%	1386	1102
HSDAJ46	692358	496	HMMER 2.1.1	PFAM: Eukaryotic-type carbonic anhydrase	PF00194	100%	92	313
			WUblastx .64	(Q9ULX7) CARBONIC ANHYDRASE XIV PRECURSOR (EC 4.2.1.1) (CAR	CAHE_HUMAN	60%	1662	1573
HSDEK49	1352253	497	WUblastx .64	(Q9Y279) Z39IG PROTEIN PRECURSOR.	Q9Y279	50%	1580	1338
HSDEK49	625998	862	HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047	163.5	362	793
						99%	299	796
						98%	791	1084
						100%	60	1256
						18.7	225	470

HSDEZ20	1352287	499	WUblastx .64	(Q9Y279) Z39IG PROTEIN PRECURSOR.	Q9Y279	88% 99%	444 126	1040 542
HSDEZ20	704101	863	WUblastx .64	probable voltage-activated cation channel - rat	pir T17101 T17101	98%	4	336
HSDFW45	589974	500	WUblastx .64	probable voltage-activated cation channel - rat	pir T17101 T17101	89%	9	335
HSDJA15	795252	501	WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KATA0536.	Q9NX85	77%	1645	1352
HSDJL42	1036471	503	WUblastx .64	(Q9BZW5) TRANSMEMBRANE 6 SUPERFAMILY MEMBER 1.	Q9BZW5	99%	4	702
HSDJL42	904821	864	WUblastx .64	(Q9BVS2) UNKNOWN (PROTEIN FOR IMAGE:3451448) (FRAGMENT).	Q9BVS2	65%	57	590
HSDJL42	905623	865	WUblastx .64	(Q9BVS2) UNKNOWN (PROTEIN FOR IMAGE:3451448) (FRAGMENT).	Q9BVS2	65%	6	539
HSDSE75	545057	506	WUblastx .64	(Q9BVS2) UNKNOWN (PROTEIN FOR IMAGE:3451448) (FRAGMENT).	Q9BVS2	64%	57	590
HSDZR57	651375	507	WUblastx .64	(O60245) PCDH7 (BH- PCDH)A.	O60245	100%	10	702
				(Q9NX00) CDNA FLJ20512 FIS, CLONE KAT09739.	Q9NX00	100%	9	209

HSHAX21	612823	508	WUblastx .64	(Q9NV22) CDNA FLJ10983 FIS, CLONE PLACE1001781, WEAKLY SIMILAR TO PRO	Q9NV22	99%	5	598
HSIAS17	1352191	509	WUblastx .64	(Q9H6H4) CDNA: FLJ22277 FIS, CLONE HRC03740.	Q9H6H4	100%	431	1201
HSIAS17	514183	867	WUblastx .64	(Q9H6H4) CDNA: FLJ22277 FIS, CLONE HRC03740.	Q9H6H4	100% 96%	108 350	362 877
HSICV24	1352248	510	WUblastx .64	(Q96J88) Putative breast epithelial stromal interaction protein.	Q96J88	100%	153	884
HSICV24	612877	868	WUblastx .64	(Q96J88) Putative breast epithelial stromal interaction protein.	Q96J88	100%	251	916
HSIDJ81	589447	511	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	74%	1289	996
HSIDX71	1033671	512	WUblastx .64	(AAK55521) PRO0764.	AAK55521	59% 65%	1829 1786	1764 1526
HSIDX71	902162	869	WUblastx .64	(AAK55521) PRO0764.	AAK55521	59% 65%	1825 1782	1760 1522
HSJBQ79	1304677	513	WUblastx .64	(Q96D15) Hypothetical 37.5 kDa protein.	Q96D15	96%	38	586
HSJBQ79	661698	870	HMMER 2.1.1	PFAM: EF hand	PF00036	23.4	663	734
			WUblastx .64	(Q96D15) Hypothetical 37.5 kDa protein.	Q96D15	99%	54	1037

HSJBQ79	371784	871	WUblastx .64	(Q96DI5) Hypothetical 37.5 kDa protein.	Q96DI5	97%	32	586
HSKCP69	702021	514	WUblastx .64	(Q9H5G5) CDNA: FLJ23462 FIS, CLONE HSI08475.	Q9H5G5	99%	49	906
HSKCP69	413210	872	WUblastx .64	(Q9H5G5) CDNA: FLJ23462 FIS, CLONE HSI08475.	Q9H5G5	96% 98%	49 234	243 905
HSKDA27	1352409	515	WUblastx .64	(BAB85613) URB.	BAB85613	83%	786	3635
HSKDA27	1074734	873	WUblastx .64	(BAB85613) URB.	BAB85613	60% 60% 52% 73% 32%	1601 1715 1718 127 1716	1789 1789 1792 1791 1790
HSKDA27	872570	874	WUblastx .64	(BAB85613) URB.	BAB85613	69% 32%	9 1597	1670 1671
HSODE04	906498	879	WUblastx .64	protein BYJ15 - common tobacco (fragment)	pir T02229 T02229	36% 96%	1071 28	1136 102
HSQEO84	1306702	522	WUblastx .64	(Q96DA4) FK506- binding protein.	Q96DA4	100%	75	740
HSQEO84	602258	880	HMMER 2.1.1	PFAM: FKBP-type peptidyl-prolyl cis-trans isomerases	PF00254	92	-30	-326
			WUblastx .64	(Q96DA4) FK506- binding protein.	Q96DA4	100%	79	744
HSQEO84	401251	881	WUblastx .64	(O54998) FK506- BINDING PROTEIN 7 PRECURSOR (EC 5.2.1.8) (FKBP-23) (PE	O54998	75% 86%	86 216	241 740

HSSDX51	566879	524	WUblastx .64	(Q9NQ80) ASPIC PRECURSOR.	Q9NQ80	83%	15	368
						40%	301	399
						72%	10	69
						41%	174	266
						32%	78	251
						26%	99	257
						87%	323	1105
HSSGD52	1352343	526	WUblastx .64	(Q96FI8) Unknown (protein for MGC:9160).	Q96FI8	100%	344	2161
HSSGD52	845666	882	WUblastx .64	(Q96FI8) Unknown (protein for MGC:9160).	Q96FI8	100%	338	2155
HSSJC35	1306937	528	WUblastx .64	(Q9H400) DJ583P15.4.1 (NOVEL PROTEIN (TRANSLATION OF CDNA FLJ20406 (E	Q9H400	81%	62	946
HSSJC35	745409	883	WUblastx .64	(Q9H400) DJ583P15.4.1 (NOVEL PROTEIN (TRANSLATION OF CDNA FLJ20406 (E	Q9H400	100%	55	939
HSSJC35	716424	884	WUblastx .64	(Q9H400) DJ583P15.4.1 (NOVEL PROTEIN (TRANSLATION OF CDNA FLJ20406 (E	Q9H400	76%	161	949
						69%	66	530
HSUBW09	413246	530	WUblastx .64	(Q95LL0) Hypothetical 11.3 kDa protein.	Q95LL0	73%	589	633
HSVBU91	596868	533	WUblastx .64	cytoplasmic linker protein CLIP-115 - rat	pir T42734 T42734	77%	327	611
						85%	356	171
HSXCG83	944388	534	WUblastx .64	(Q9H7F4) CDNA: FLJ20979 FIS, CLONE ADSU01938.	Q9H7F4	93%	101	901

HSXCG83	830673	885	WUblastx .64	(Q9H7F4) CDNA: FLJ20979 FIS, CLONE ADSU01938.	Q9H7F4	98%	4	726
HSXGI47	886200	536	WUblastx .64	(Q9H728) CDNA: FLJ21463 FIS, CLONE COL04765.	Q9H728	56% 55%	585 762	860 965
HSYAV50	847358	537	HMMER 2.1.1	PFAM: Leucine Rich Repeat	PF00560	97.9	383	454
			WUblastx .64	(Q96CX1) Similar to RIKEN cDNA 2610528G05 gene (Fragment).	Q96CX1	96%	371	2170
HSYAZ50	902235	889	WUblastx .64	(Q96NR6) CDNA FLJ30278 fis, clone BRACE2002755.	Q96NR6	70%	1945	2064
HSYAZ50	882732	890	WUblastx .64	(Q9NVZ3) CDNA FLJ10420 FIS, CLONE NT2RP1000170.	Q9NVZ3	100%	50	838
HSYAZ63	1177537	540	WUblastx .64	(Q9Y613) FH1/FH2 DOMAINS- CONTAINING PROTEIN (FORMIN HOMOLOG	FHOS_HUMAN	98% 55% 81% 100% 92% 28% 42% 28% 33% 56% 73%	889 272 2101 478 3007 289 608 1015 2030 2005 2573	1713 544 2514 750 3090 654 670 1458 2119 2052 2941
HSYAZ63	862063	891	WUblastx	(Q9Y613) FH1/FH2	FHOS_HUMAN	69%	458	871

					DOMAINS- CONTAINING PROTEIN (FORMIN HOMOLOG			92%	1364	1447
HSYBG37	1056317	541	WUblastx .64	hypothetical protein c316G12.3 [imported] - human	pir T45062 T45062	100%	47	961		
HSYBG37	581098	892	WUblastx .64	hypothetical protein c316G12.3 [imported] - human	pir T45062 T45062	100%	48	962		
HSZAF47	1352172	542	WUblastx .64	(Q9BXJ2) COMPLEMENT-C1Q TUMOR NECROSIS FACTOR-RELATED PROTEIN.	Q9BXJ2	100%	106	972		
HSZAF47	456551	893	HMMER 2.1.1	PFAM: Collagen triple helix repeat (20 copies)	PF01391	54.4	299	478		
			WUblastx .64	(Q9BXJ2) COMPLEMENT-C1Q TUMOR NECROSIS FACTOR-RELATED PROTEIN.	Q9BXJ2	92%	107	976		
HT3SF53	884170	543	WUblastx .64	(Q9H5B4) DJ470L14.2.1 (STAUFEN (RNA BINDING PROTEIN) ISOFORM 1).	Q9H5B4	100%	312	533		
HT5GJ57	1299921	544	WUblastx .64	(Q9GZY6) CDNA FLJ11237 FIS, CLONE PLACE1008531	Q9GZY6	89%	105	833		

HT5GJ57	740767	894		WUblastx .64	(WBSCR5) (WBSCR15 PROT (Q9GZY6) CDNA FLJ11237 FIS, CLONE PLACE1008531 (WBSCR5) (WBSCR15 PROT	Q9GZY6	84%	122	856
HTADW91	844835	545		WUblastx .64	(Q8WV10) Hypothetical 38.4 kDa protein.	Q8WV10	86%	155	1117
HTADX17	753289	546		WUblastx .64	(Q96A28) CD84-H1 (CD2 FAMILY Y 10).	Q96A28	100% 99%	92 408	412 959
HTADX17	457172	895		WUblastx .64	(Q96A28) CD84-H1 (CD2 FAMILY Y 10).	Q96A28	78% 97% 99%	490 548 84	585 952 488
HTAEE28	1018291	547		WUblastx .64	(Q9D4I2) 4932408F18RIK PROTEIN.	Q9D4I2	78%	319	1161
HTAEE28	882919	896		WUblastx .64	(Q9D4I2) 4932408F18RIK PROTEIN.	Q9D4I2	78%	372	617
HTAEE28	864120	897		WUblastx .64	(Q9D4I2) 4932408F18RIK PROTEIN.	Q9D4I2	76%	142	768
HTDAF28	396835	548		WUblastx .64	(Q9BX79) STRA6 ISOFORM 1.	Q9BX79	98%	17	298
HTEAF65	866485	549		WUblastx .64	(AAH25354) Similar to putative.	AAH25354	100%	9	257
HTEBI28	462221	550		WUblastx .64	(Q95LI0) Epididymis- specific protein ESP13.6.	Q95LI0	46%	43	231
HTEDF80	587326	551		WUblastx	(Q9NP89)	Q9NP89	100%	253	327

				.64	HYPOTHETICAL 42.7 KDA PROTEIN (FRAGMENT).			91%	353	451 1073 210 856 863
HTEDY42	1352193	552		WUblastx .64	(Q96L06) Similar to RIKEN cDNA 1700011E04 gene.	Q96L06		100%	19	717
HTEDY42	519372	898		HMMER 2.1.1	PFAM: SCP-like extracellular protein	PF00188		20	-98	-193
				WUblastx .64	(Q96L06) Similar to RIKEN cDNA 1700011E04 gene.	Q96L06		100%	19	231
								33%	576	719
								94%	224	700
HTEGI42	908143	555		WUblastx .64	(Q8WW43) Hypothetical 28.5 kDa protein.	Q8WW43		99%	26	796
HTEGI42	904624	899		WUblastx .64	(Q8WW43) Hypothetical 28.5 kDa protein.	Q8WW43		99%	145	915
HTEGI42	850770	900		WUblastx .64	(AAL93028) Hypothetical 26.9 kDa protein.	AAL93028		76%	154	26
								79%	154	38
								79%	154	38
								79%	154	38
								72%	153	25
								81%	155	45
								83%	156	46
								96%	155	72
								85%	154	62
								79%	154	38
HTEGI42	847564	901		WUblastx .64	(Q14288) HYPOTHETICAL	Q14288		92%	503	429
								61%	444	1

HTEHR24	835894	556	WUblastx .64		PROTEIN (FRAGMENT). (Q9HBV2) SPERM MEMBRANE ANTIGEN SMARC32.	Q9HBV2		76%		84	959
HTEHR24	513039	903	WUblastx .64		(Q9HBV2) SPERM MEMBRANE ANTIGEN SMARC32.	Q9HBV2		76% 100% 96%	41 692 514		529 922 693
HTEHU93	722254	557	WUblastx .64		(O60676) CYSTATIN- RELATED EPIDIDYMAL SPERMATOGENIC PROTEIN	CRES_HUMAN		100%	188		613
HTEHU93	423009	904	HMMER 2.1.1		PFAM: Cystatin domain	PF00031		31.7	35		-105
			WUblastx .64		(O60676) CYSTATIN- RELATED EPIDIDYMAL SPERMATOGENIC PROTEIN	CRES_HUMAN		100% 78%	504 187		614 552
HTEJN13	1352272	560	WUblastx .64		(Q9BWY1) BA552M11.5 (NOVEL PROTEIN) (FRAGMENT).	Q9BWY1		100% 100%	158 351		193 779
HTEJN13	658744	905	WUblastx .64		(Q9DAR9) 1700001D09RIK PROTEIN.	Q9DAR9		60% 77%	525 163		743 516
HTEJN13	381941	906	WUblastx .64		(Q9HBK8) AD026.	Q9HBK8		92% 94%	191 214		229 633
HTEPG70	834931	562	WUblastx .64		(O75295) R27328_2.	O75295		93%	23		268

HTGAU75	597467	563	WUblastx .64	(Q9NZX5) HSPC062.	Q9NZX5	55%	502 149	672 661
HTGEP89	410582	564	WUblastx .64	(Q9DAL9) 1700007K09RIK PROTEIN.	Q9DAL9	44%	258	566
HTHBG43	919911	565	WUblastx .64	(Q9NX17) CDNA FLJ20489 FIS, CLONE KAT08285.	Q9NX17	52%	846	517
HTHDJ94	693652	567	HMMER 2.1.1	PFAM: Oxidoreductase FAD/NAD-binding domain	PF00175	160.3	552	896
			WUblastx .64	(Q9UHQ9) NADH- CYTOCHROME B5 REDUCTASE ISOFORM.	Q9UHQ9	89%	66	941
HTHDS25	772559	568	WUblastx .64	(Q9P1H3) PRO1438.	Q9P1H3	66%	1045	911
HTJMA95	706618	569	HMMER 2.1.1	PFAM: Ammonium Transporter Family	PF00909	62.1	533	691
			WUblastx .64	(Q9UBD6) RH TYPE C GLYCOPROTEIN (TUMOR-RELATED PROTEIN DRC2).	Q9UBD6	98% 100%	3 449	455 1069
HTJML75	1040047	570	WUblastx .64	(Q9UIX6) ANAPHASE- PROMOTING COMPLEX SUBUNIT 2.	Q9UIX6	100%	30	2495
HTJML75	873355	909	WUblastx .64	(Q9UIX6) ANAPHASE- PROMOTING COMPLEX SUBUNIT 2.	Q9UIX6	95% 98% 94%	40 423 911	423 1016 2503
HTLAA40	519329	571	WUblastx	(Q9NV11) CDNA	Q9NV11	100%	360	482

				.64	FLJ11004 FIS, CLONE PLACE1002941.		100%	14	217
HTLBE23	902187	572	WUblastx .64	(Q96M29) CDNA FLJ32871 fis, clone TESTI2003914, weakly similar to Tek	Q96M29		98% 93% 81%	176 840 1112	838 980 1177
HTLBE23	885431	910	WUblastx .64	(Q96M29) CDNA FLJ32871 fis, clone TESTI2003914, weakly similar to Tek	Q96M29		92%	796	98
HTLEP53	634852	573	WUblastx .64	(Q8WTZ3) Hypothetical 27.2 kDa protein.	Q8WTZ3		66% 68%	543 806	499 534
HTLFE42	460583	574	WUblastx .64	(Q9NSI0) PRED58 PROTEIN (FRAGMENT).	Q9NSI0		99%	17	346
HTLFE57	1352310	575	WUblastx .64	(Q9D2V1) 2310009N05RIK PROTEIN.	Q9D2V1		88%	1	687
HTLFE57	791409	911	WUblastx .64	(Q9D7G6) 2310009N05RIK PROTEIN.	Q9D7G6		90%	12	698
HTLFE57	608317	912	WUblastx .64	(Q9D7G6) 2310009N05RIK PROTEIN.	Q9D7G6		90%	2	619
HTLGE31	1035130	576	WUblastx .64	(Q9NY64) GLUCOSE TRANSPORTER.	Q9NY64		81%	3	149
HTLHY14	838460	577	WUblastx .64	(Q96L02) Hypothetical 24.5 kDa protein.	Q96L02		99% 100%	36 528	434 773
HTLIT32	833906	578	WUblastx .64	(Q96QHI) NB1 Glycoprotein precursor.	Q96QHI		32% 28%	312 330	932 1007

HTLIV19	1046341	579	WUblastx .64	(Q96LS9) CDNA FLJ25101 fis, clone CBR01328.	Q96LS9	50% 69%	119 178	172 315
HTODK73	526021	582	WUblastx .64	(Q9H8P2) CDNA FLJ13348 FIS, CLONE OVARC1002127, WEAKLY SIMILAR TO SOD	Q9H8P2	93% 100% 71% 43% 61% 80%	404 567 433 4 418 21	448 707 474 189 519 401
HTOHM15	1028538	585	WUblastx .64	(Q9NVL9) CDNA FLJ10649 FIS, CLONE NT2RP2005835, WEAKLY SIMILAR TO SHP	Q9NVL9	96% 100%	1641 1507	1718 1650
HTOHM15	848200	915	HMMER 2.1.1	PFAM: UBX domain	PF00789	97.6	794	1033
			WUblastx .64	(Q9H102) DJ776F14.1 (ORTHOLOG OF MOUSE P47).	Q9H102	100% 97%	37 95	129 1036
HTOHM15	848196	916	WUblastx .64	(Q9NVL9) CDNA FLJ10649 FIS, CLONE NT2RP2005835, WEAKLY SIMILAR TO SHP	Q9NVL9	96% 100%	1307 1173	1384 1316
HTOIZ02	847904	917	WUblastx .64	ataxin 7 - human	pir T09193 T09193	99% 31% 47% 28% 97%	714 437 303 224 2	1196 619 359 718 736
HTOJA73	797108	589	WUblastx	(Q9H387) PRO2550.	Q9H387	63%	1044	955

HTOJK60	545067	590	.64	(Q9HA67) CDNA FLJ12155 FIS, CLONE MAMMA1000472.	Q9HA67	74%	1246	1046
HTPBW79	1317835	591	WUblastx .64	(Q96S93) Hypothetical 41.7 kDa protein.	Q96S93	100%	178	1263
HTPBW79	581435	918	WUblastx .64	(Q96S93) Hypothetical 41.7 kDa protein.	Q96S93	99%	302	1387
HTPBW79	396459	919	WUblastx .64	(Q9BWS9) UNKNOWN (PROTEIN FOR MGC:3234).	Q9BWS9	62% 99%	1198 92	1269 1243
HTTDB46	812763	593	WUblastx .64	(Q9Y2C7) BUTYROPHILIN LIKE RECEPTOR.	Q9Y2C7	70% 83% 59% 100%	106 727 1007 1644	543 762 1072 2180
HTTDB46	909573	920	HMMER 2.1.1	PFAM: SPRY domain	PF00622	65.9	-956	-1276
HTWCT03	429618	594	WUblastx .64	(O95014) WUGSC:H_DJ0855D21.2 PROTEIN.	O95014	82%	1488	1592
HTWDF76	714344	595	WUblastx .64	(Q9BTF2) REC8P, A MEIOTIC RECOMBINATION AND SISTER CHROMATID COHESION	Q9BTF2	100% 92% 27% 35% 37% 79% 70% 76%	792 370 7 179 379 542 179 4	875 510 498 238 525 688 280 192
HTXAJ12	1310814	596	WUblastx .64	(Q9D7W4) 2210021G2IRIK	Q9D7W4	45% 57%	12 97	77 273

HTXAJ12	567434	921	WUblastx .64	PROTEIN. (AAH24685) Similar to transmembrane 4 superfamily m	AAH24685	100% 98%	9 97	95 267
HTXDW56	695765	598	WUblastx .64	(Q96A54) Similar to CGI- 45 protein (Hypothetical 42.6 kDa protein).	Q96A54	99%	7	819
HTXFL30	620001	599	WUblastx .64	(Q96KR5) Leishmanolysin-like peptidase, variant 2 (EC 3.4.24.36).	Q96KR5	98% 100% 100% 100%	305 30 213 68	1990 68 299 94
HTXKFP95	891275	600	WUblastx .64	(AAH08360) Similar to hypothetical protein FLJ22376	AAH08360	84% 92%	324 81	644 203
HTXKFP95	834438	923	WUblastx .64	(AAH08360) Similar to hypothetical protein FLJ22376	AAH08360	100%	2	553
HTXKFP61	824083	601	WUblastx .64	(Q9H0S8) HYPOTHETICAL 53.0 KDA PROTEIN.	Q9H0S8	83%	3	1064
HUDBZ89	1352211	602	WUblastx .64	(Q9VH80) CG16908 PROTEIN.	Q9VH80	23%	271	1530
HUDBZ89	562791	924	WUblastx .64	(Q9VH80) CG16908 PROTEIN.	Q9VH80	22% 33%	7 330	327 641
HUFEF62	645101	604	WUblastx .64	hypothetical L1 protein (third intron of gene TS) - human	pir JU0033 JU0033	81% 84%	355 314	308 12
HUFEF62	630097	926	WUblastx .64	hypothetical L1 protein (third intron of gene TS) - human	pir JU0033 JU0033	81% 84%	347 306	300 4

HUKAH51	1352424	605	WUblastx .64	(Q96NZ9) Proline-rich acidic protein.	Q96NZ9	100%	286	738
HUKAH51	1300737	927	WUblastx .64	(Q96NZ9) Proline-rich acidic protein.	Q96NZ9	94%	144	569
HUKAH51	603538	928	WUblastx .64	(Q96NZ9) Proline-rich acidic protein.	Q96NZ9	100% 93%	462 55	479 462
HUKBT29	694590	606	WUblastx .64	(Q96AA2) Obscurin.	Q96AA2	82% 30% 33% 29% 100% 34% 28%	131 520 500 152 1039 597 134	1300 597 571 370 1338 710 316
HUSIG64	566762	607	WUblastx .64	(O60763) GENERAL VESICULAR TRANSPORT FACTOR P115 (TRANSCYTO	VDP_HUMAN	100%	9	977
HUSXS50	1352367	608	WUblastx .64	(Q9Y3I1) F-BOX ONLY PROTEIN 7.	FBX7_HUMAN	100%	280	1845
HUSXS50	883176	929	WUblastx .64	(AAH08361) F-box only protein 7.	AAH08361	99% 42% 100%	281 1566 1067	1069 1622 1666
HUSXS50	655372	930	WUblastx .64	(AAH08361) F-box only protein 7.	AAH08361	77% 26% 100%	1 43 317	459 219 700
HVARW53	1194812	609	WUblastx .64	(Q9V6L4) CG12251 PROTEIN.	Q9V6L4	38% 24%	623 87	748 620
HVARW53	1044491	931	WUblastx .64	(Q9V6L4) CG12251 PROTEIN.	Q9V6L4	40% 25%	569 72	673 581
HWAAD63	838626	610	HMMER	PFAM: Sodium/calcium	PF01699	62.8	346	453

			2.1.1	exchanger protein (Q9HC58) SODIUM/CALCIUM EXCHANGER NCKX3.	Q9HC58		65%	229	813
			WUblastx .64						
HWAAD63	833089	932	HMMER 2.1.1	PFAM: Sodium/calcium exchanger protein	PF01699		37.8	346	453
			WUblastx .64	(Q9HC58) SODIUM/CALCIUM EXCHANGER NCKX3.	Q9HC58		78% 55% 72%	229 429 533	453 596 814
HWAAD63	793875	933	HMMER 2.1.1	PFAM: Sodium/calcium exchanger protein	PF01699		113.7	336	773
			WUblastx .64	(Q9HC58) SODIUM/CALCIUM EXCHANGER NCKX3.	Q9HC58		76%	219	806
HWABY10	768334	612	WUblastx .64	(Q96AW1) Hypothetical 19.2 kDa protein.	Q96AW1		100%	165	665
HWBAO62	838164	614	HMMER 2.1.1	PFAM: Immunoglobulin domain	PF00047		27.9	202	402
			WUblastx .64	(Q14288) HYPOTHETICAL PROTEIN (FRAGMENT).	Q14288		45% 66% 62% 55%	1331 1158 1847 1594	1618 1334 1894 1839
HWBAO62	625914	934	WUblastx .64	(Q14288) HYPOTHETICAL PROTEIN (FRAGMENT).	Q14288		43% 62% 66% 55%	1358 1874 1185 1621	1645 1921 1361 1866
HWBAR88	836469	615	WUblastx .64	(Q9Y2C2) DERMATAN/CHONDR OITIN SULFATE 2- SULFOTRANSFERASE.	Q9Y2C2		96% 100% 83%	215 107 958	982 241 1050

HWBCB89	1093347	616	WUblastx .64	(BAB55294) CDNA FLJ14777 fis, clone NT2RP4000259, w	BAB55294	100%	37	597
HWBCB89	886210	935	HMMER 2.1.1	PFAM: Glutathione peroxidases	PF00255	170.2	104	433
			WUblastx .64	(BAB55294) CDNA FLJ14777 fis, clone NT2RP4000259, w	BAB55294	100%	35	595
HWBCP79	846382	617	WUblastx .64	(Q96MM0) CDNA FLJ32172 fis, clone PLACE6000555.	Q96MM0	27% 85%	340 158	143 78
HWBCP79	646977	936	WUblastx .64	(Q96MM0) CDNA FLJ32172 fis, clone PLACE6000555.	Q96MM0	27% 85%	330 148	133 68
HWBDP28	1352265	618	WUblastx .64	(Q9H687) CDNA: FLJ22494 FIS, CLONE HRC11131.	Q9H687	99%	480	1079
HWBFE57	907063	619	WUblastx .64	(Q9NR73) MACROPHAGE ABC TRANSPORTER.	Q9NR73	93%	206	1048
HWBFE57	907067	938	WUblastx .64	(Q96S58) ABCA-SSN.	Q96S58	99% 50% 97% 29% 47% 29% 29% 29% 37% 32%	2784 952 5801 4499 4550 528 3727 5062 4123 3274	196 905 5133 4134 4500 109 3587 4907 3362 3038

								37%	1293	532
HWBFES7	876136	939	WUblastx .64	(Q14287) HYPOTHETICAL PROTEIN (FRAGMENT).	Q14287			58%	252	13
HWDAH38	1028519	621	WUblastx .64	(Q9NX85) CDNA FLJ20378 FIS, CLONE KAIA0536.	Q9NX85			71%	943	1119
HWDAH38	889281	941	WUblastx .64	(Q64150) NUCLEAR LOCALIZATION SIGNAL BINDING PROTEIN.	Q64150			69%	1113	1250
HWHGP71	995431	622	HMMER 2.1.1	PFAM: 7 transmembrane receptor (rhodopsin family)	PF00001			48%	1600	1340
			WUblastx .64	(Q64150) NUCLEAR LOCALIZATION SIGNAL BINDING PROTEIN.	Q64150			60%	795	673
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			31.2	389	766
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			56%	766	1020
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			47%	434	484
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			74%	101	766
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			77%	106	465
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			100%	555	770
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			58%	776	1036
HWHGP71	839250	942	blastx.2	(AJ278605) leukotriene B4 receptor 2 [Homo sapiens]	emb CAB96134.1			100%	26	706

HWHGQ49	636080	943	.64	induced protein. (AAH25278) Androgen induced protein.	AAH25278	93%	42	725
HWHGU54	695695	624	HMMER 2.1.1	PFAM: Serpins (serine protease inhibitors)	PF00079	501.1	277	1377
			WUblastx .64	(AAL99574) OL-64 protein.	AAL99574	62%	145	1377
HWHGGZ51	886212	625	WUblastx .64	(Q9UJ74) HYPOTHETICAL 36.0 KDA PROTEIN (C4.4A PROTEIN).	Q9UJ74	100%	33	1070
HWHHL34	805642	626	WUblastx .64	(O75915) JWA PROTEIN (HSPC127) (VITAMIN A RESPONSIVE, CYTOSKELETON RE	O75915	100%	131	694
HWHHL34	801943	944	WUblastx .64	(O75915) JWA PROTEIN (HSPC127) (VITAMIN A RESPONSIVE, CYTOSKELETON RE	O75915	92%	53	613
HWHHL34	341560	945	WUblastx .64	(O75915) JWA PROTEIN (HSPC127) (VITAMIN A RESPONSIVE, CYTOSKELETON RE	O75915	100%	101	664
HWLEV32	1032602	627	WUblastx .64	(O00378) PUTATIVE P150.	O00378	44% 38%	684 556	535 17
HWLEV32	873296	946	WUblastx .64	retrovirus-related reverse transcriptase pseudogene - human	pir A25313 GNHUL1	50% 40%	614 510	525 7
HWLEV32	881710	947	WUblastx .64	(BAB85074) CDNA FLJ23835 fis, clone	BAB85074	97%	61	396

HWLEV32	846351	948	WUblastx .64	KAIA2214. (BAB85074) CDNA FLJ23835 fis, clone KAIA2214.	BAB85074	99%	2	409
HWLIH65	793713	628	HMMER 2.1.1	PFAM: Integral membrane protein	PF01940	49.3	147	455
			WUblastx .64	(AAH08596) Unknown (protein for MGC:16985).	AAH08596	98%	81	623
HYAAJ71	826754	630	WUblastx .64	(Q9NX17) CDNA FLJ20489 FIS, CLONE KAT08285.	Q9NX17	62%	1147	1464
HUSBA88	895435	631	HMMER 2.1.1	PFAM: Glycosyl hydrolase family 47	PF01532	694	783	2102
			WUblastx .64	(Q9UKM7) ALPHA 1,2- MANNOSIDASE.	Q9UKM7	94%	18	2114

RACE Protocol For Recovery of Full-Length Genes

Partial cDNA clones can be made full-length by utilizing the rapid amplification of cDNA ends (RACE) procedure described in Frohman, M.A., et al., Proc. Nat'l. Acad. Sci. USA, 85:8998-9002 (1988). A cDNA clone missing either the 5' or 3' end can be reconstructed to include the absent base pairs extending to the translational start or stop codon, respectively. In some cases, cDNAs are missing the start codon of translation, therefore. The following briefly describes a modification of this original 5' RACE procedure. Poly A⁺ or total RNA is reverse transcribed with Superscript II (Gibco/BRL) and an antisense or complementary primer specific to the cDNA sequence. The primer is removed from the reaction with a Microcon Concentrator (Amicon). The first-strand cDNA is then tailed with dATP and terminal deoxynucleotide transferase (Gibco/BRL). Thus, an anchor sequence is produced which is needed for PCR amplification. The second strand is synthesized from the dA-tail in PCR buffer, Taq DNA polymerase (Perkin-Elmer Cetus), an oligo-dT primer containing three adjacent restriction sites (XhoI, SalI and ClaI) at the 5' end and a primer containing just these restriction sites. This double-stranded cDNA is PCR amplified for 40 cycles with the same primers as well as a nested cDNA-specific antisense primer. The PCR products are size-separated on an ethidium bromide-agarose gel and the region of gel containing cDNA products the predicted size of missing protein-coding DNA is removed. cDNA is purified from the agarose with the Magic PCR Prep kit (Promega), restriction digested with XhoI or SalI, and ligated to a plasmid such as pBluescript SKII (Stratagene) at XhoI and EcoRV sites. This DNA is transformed into bacteria and the plasmid clones sequenced to identify the correct protein-coding inserts. Correct 5' ends are confirmed by comparing this sequence with the putatively identified homologue and overlap with the partial cDNA clone. Similar methods known in the art and/or commercial kits are used to amplify and recover 3' ends.

Several quality-controlled kits are commercially available for purchase. Similar reagents and methods to those above are supplied in kit form from Gibco/BRL for both 5' and 3' RACE for recovery of full length genes. A second kit is available from Clontech which is a modification of a related technique, SLIC (single-stranded ligation to single-stranded cDNA), developed by Dumas et al., Nucleic Acids Res., 19:5227-32 (1991). The major differences in procedure are that the RNA is alkaline hydrolyzed after reverse transcription and RNA ligase is used to join a restriction site-containing anchor primer to the first-strand cDNA. This obviates the necessity for the dA-tailing reaction which results in a polyT stretch that is difficult to sequence past.

An alternative to generating 5' or 3' cDNA from RNA is to use cDNA library double-stranded DNA. An asymmetric PCR-amplified antisense cDNA strand is synthesized with an antisense cDNA-specific primer and a plasmid-anchored primer. These primers are removed and a symmetric PCR reaction is performed with a nested cDNA-specific antisense primer and the plasmid-anchored primer.

RNA Ligase Protocol For Generating The 5' or 3' End Sequences To Obtain Full Length Genes

Once a gene of interest is identified, several methods are available for the identification of the 5' or 3' portions of the gene which may not be present in the original cDNA plasmid. These methods include, but are not limited to, filter probing, clone enrichment using specific probes and protocols similar and identical to 5' and 3' RACE. While the full length gene may be present in the library and can be identified by probing, a useful method for generating the 5' or 3' end is to use the existing sequence information from the original cDNA to generate the missing information. A method similar to 5' RACE is available for generating the missing 5' end of a desired full-length gene. (This method was published by Fromont-Racine et al., *Nucleic Acids Res.*, 21(7):1683-1684 (1993)). Briefly, a specific RNA oligonucleotide is ligated to the 5' ends of a population of RNA presumably containing full-length gene RNA transcript and a primer set containing a primer specific to the ligated RNA oligonucleotide and a primer specific to a known sequence of the gene of interest, is used to PCR amplify the 5' portion of the desired full length gene which may then be sequenced and used to generate the full length gene. This method starts with total RNA isolated from the desired source, poly A RNA may be used but is not a prerequisite for this procedure. The RNA preparation may then be treated with phosphatase if necessary to eliminate 5' phosphate groups on degraded or damaged RNA which may interfere with the later RNA ligase step. The phosphatase if used is then inactivated and the RNA is treated with tobacco acid pyrophosphatase in order to remove the cap structure present at the 5' ends of messenger RNAs. This reaction leaves a 5' phosphate group at the 5' end of the cap cleaved RNA which can then be ligated to an RNA oligonucleotide using T4 RNA ligase. This modified RNA preparation can then be used as a template for first strand cDNA synthesis using a gene specific oligonucleotide. The first strand synthesis reaction can then be used as a template for PCR amplification of the desired 5' end using a primer specific to the ligated RNA oligonucleotide and a primer specific to the known sequence of the gene of interest. The resultant product is then sequenced and analyzed to confirm that the 5' end sequence belongs to the relevant gene.

The present invention also relates to vectors or plasmids which include such DNA sequences, as well as the use of the DNA sequences. The material deposited with the ATCC (e.g., as described in columns 2 and 3 of Table 1A, and/or as set forth in Table 1B, Table 6, or Table 7) is a mixture of cDNA clones derived from a variety of human tissue and cloned in either a plasmid vector or a phage vector, as described, for example, in Table 1A and Table 7. These deposits are referred to as "the deposits" herein. The tissues from which some of the clones were derived are listed in Table 7, and the vector in which the corresponding cDNA is contained is also indicated in Table 7. The deposited material includes cDNA clones corresponding to SEQ ID NO:X described, for example, in Table 1A and/or Table 1B (ATCC Deposit No:Z). A clone which is isolatable

from the ATCC Deposits by use of a sequence listed as SEQ ID NO:X, may include the entire coding region of a human gene or in other cases such clone may include a substantial portion of the coding region of a human gene. Furthermore, although the sequence listing may in some instances list only a portion of the DNA sequence in a clone included in the ATCC Deposits, it is well within the ability of one skilled in the art to sequence the DNA included in a clone contained in the ATCC Deposits by use of a sequence (or portion thereof) described in, for example Tables 1A and/or Table 1B or Table 2, by procedures hereinafter further described, and others apparent to those skilled in the art.

Also provided in Table 1A and Table 7 is the name of the vector which contains the cDNA clone. Each vector is routinely used in the art. The following additional information is provided for convenience.

Vectors Lambda Zap (U.S. Patent Nos. 5,128,256 and 5,286,636), Uni-Zap XR (U.S. Patent Nos. 5,128, 256 and 5,286,636), Zap Express (U.S. Patent Nos. 5,128,256 and 5,286,636), pBluescript (pBS) (Short, J. M. et al., *Nucleic Acids Res.* 16:7583-7600 (1988); Altling-Mees, M. A. and Short, J. M., *Nucleic Acids Res.* 17:9494 (1989)) and pBK (Altling-Mees, M. A. et al., *Strategies* 5:58-61 (1992)) are commercially available from Stratagene Cloning Systems, Inc., 11011 N. Torrey Pines Road, La Jolla, CA, 92037. pBS contains an ampicillin resistance gene and pBK contains a neomycin resistance gene. Phagemid pBS may be excised from the Lambda Zap and Uni-Zap XR vectors, and phagemid pBK may be excised from the Zap Express vector. Both phagemids may be transformed into *E. coli* strain XL-1 Blue, also available from Stratagene.

Vectors pSport1, pCMVSPORT 1.0, pCMVSPORT 2.0 and pCMVSPORT 3.0, were obtained from Life Technologies, Inc., P. O. Box 6009, Gaithersburg, MD 20897. All Sport vectors contain an ampicillin resistance gene and may be transformed into *E. coli* strain DH10B, also available from Life Technologies. See, for instance, Gruber, C. E., et al., *Focus* 15:59- (1993). Vector lafmid BA (Bento Soares, Columbia University, New York, NY) contains an ampicillin resistance gene and can be transformed into *E. coli* strain XL-1 Blue. Vector pCR[®]2.1, which is available from Invitrogen, 1600 Faraday Avenue, Carlsbad, CA 92008, contains an ampicillin resistance gene and may be transformed into *E. coli* strain DH10B, available from Life Technologies. See, for instance, Clark, J. M., *Nuc. Acids Res.* 16:9677-9686 (1988) and Mead, D. et al., *Bio/Technology* 9: (1991).

The present invention also relates to the genes corresponding to SEQ ID NO:X, SEQ ID NO:Y, and/or the deposited clone (ATCC Deposit No:Z). The corresponding gene can be isolated in accordance with known methods using the sequence information disclosed herein. Such methods include preparing probes or primers from the disclosed sequence and identifying or amplifying the corresponding gene from appropriate sources of genomic material.

Also provided in the present invention are allelic variants, orthologs, and/or species homologs. Procedures known in the art can be used to obtain full-length genes, allelic variants,

splice variants, full-length coding portions, orthologs, and/or species homologs of genes corresponding to SEQ ID NO:X or the complement thereof, polypeptides encoded by genes corresponding to SEQ ID NO:X or the complement thereof, and/or the cDNA contained in ATCC Deposit No:Z, using information from the sequences disclosed herein or the clones deposited with the ATCC. For example, allelic variants and/or species homologs may be isolated and identified by making suitable probes or primers from the sequences provided herein and screening a suitable nucleic acid source for allelic variants and/or the desired homologue.

The polypeptides of the invention can be prepared in any suitable manner. Such polypeptides include isolated naturally occurring polypeptides, recombinantly produced polypeptides, synthetically produced polypeptides, or polypeptides produced by a combination of these methods. Means for preparing such polypeptides are well understood in the art.

The polypeptides may be in the form of the secreted protein, including the mature form, or may be a part of a larger protein, such as a fusion protein (see below). It is often advantageous to include an additional amino acid sequence which contains secretory or leader sequences, pro-sequences, sequences which aid in purification, such as multiple histidine residues, or an additional sequence for stability during recombinant production.

The polypeptides of the present invention are preferably provided in an isolated form, and preferably are substantially purified. A recombinantly produced version of a polypeptide, including the secreted polypeptide, can be substantially purified using techniques described herein or otherwise known in the art, such as, for example, by the one-step method described in Smith and Johnson, *Gene* 67:31-40 (1988). Polypeptides of the invention also can be purified from natural, synthetic or recombinant sources using techniques described herein or otherwise known in the art, such as, for example, antibodies of the invention raised against the polypeptides of the present invention in methods which are well known in the art.

The present invention provides a polynucleotide comprising, or alternatively consisting of, the nucleic acid sequence of SEQ ID NO:X, and/or the cDNA sequence contained in ATCC Deposit No:Z. The present invention also provides a polypeptide comprising, or alternatively, consisting of, the polypeptide sequence of SEQ ID NO:Y, a polypeptide encoded by SEQ ID NO:X or a complement thereof, a polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or the polypeptide sequence encoded by a nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1C. Polynucleotides encoding a polypeptide comprising, or alternatively consisting of, the polypeptide sequence of SEQ ID NO:Y, a polypeptide encoded by SEQ ID NO:X, a polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or a polypeptide sequence encoded by a nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1C are also encompassed by the invention. The present invention further encompasses a polynucleotide comprising, or alternatively consisting of, the complement of the nucleic acid sequence of SEQ ID NO:X, a nucleic acid sequence encoding a polypeptide encoded by the

complement of the nucleic acid sequence of SEQ ID NO:X, and/or the cDNA contained in ATCC Deposit No:Z.

Moreover, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in Table 1C column 6, or any combination thereof. Additional, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the complementary strand(s) of the sequences delineated in Table 1C column 6, or any combination thereof. In further embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in Table 1C, column 6, and have a nucleic acid sequence which is different from that of the BAC fragment having the sequence disclosed in SEQ ID NO:B (see Table 1C, column 5). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in Table 1C, column 6, and have a nucleic acid sequence which is different from that published for the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in Table 1C, column 6, and have a nucleic acid sequence which is different from that contained in the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides and polypeptides are also encompassed by the invention.

Further, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1), or any combination thereof. Additional, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the complementary strand(s) of the sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1), or any combination thereof. In further embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1) and have a nucleic acid sequence which is different from that of the BAC fragment having the sequence disclosed in SEQ ID NO:B (see Table 1C, column 5). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1) and have a nucleic acid sequence which is different from that published for the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). In additional embodiments, the above-described

polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1) and have a nucleic acid sequence which is different from that contained in the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides and polypeptides are also encompassed by the invention.

Further, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in column 6 of Table 1C which correspond to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2), or any combination thereof. Additional, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the complementary strand(s) of the sequences delineated in column 6 of Table 1C which correspond to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2), or any combination thereof. In further embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2) and have a nucleic acid sequence which is different from that of the BAC fragment having the sequence disclosed in SEQ ID NO:B (see Table 1C, column 5). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2) and have a nucleic acid sequence which is different from that published for the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in column 6 of Table 1C which correspond to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2) and have a nucleic acid sequence which is different from that contained in the BAC clone identified as BAC ID NO:A (See Table 1C, column 4). Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides and polypeptides are also encompassed by the invention.

Moreover, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in the same row of Table 1C column 6, or any combination thereof. Additional, representative examples of polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the complementary

strand(s) of the sequences delineated in the same row of Table 1C column 6, or any combination thereof. In preferred embodiments, the polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the complementary strand(s) of the sequences delineated in the same row of Table 1C column 6, wherein sequentially delineated sequences in the table (i.e. corresponding to those exons located closest to each other) are directly contiguous in a 5' to 3' orientation. In further embodiments, above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in the same row of Table 1C, column 6, and have a nucleic acid sequence which is different from that of the BAC fragment having the sequence disclosed in SEQ ID NO:B (see Table 1C, column 5). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in the same row of Table 1C, column 6, and have a nucleic acid sequence which is different from that published for the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated in the same row of Table 1C, column 6, and have a nucleic acid sequence which is different from that contained in the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in column 6 of Table 1C, and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1C, column 2) or fragments or variants thereof. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in column 6 of Table 1C which correspond to the same Clone ID (see Table 1C, column 1), and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1A, Table 1B, or Table 1C) or fragments or variants thereof. In preferred embodiments, the delineated sequence(s) and polynucleotide sequence of SEQ ID NO:X correspond to the same Clone ID. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

In further specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more of the sequences delineated in the same row of column 6 of Table 1C, and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1A, Table 1B, or Table 1C) or fragments or variants thereof. In preferred embodiments, the delineated sequence(s) and polynucleotide sequence of

SEQ ID NO:X correspond to the same row of column 6 of Table 1C. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of the sequence of SEQ ID NO:X are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of a fragment or variant of the sequence of SEQ ID NO:X are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of the sequence of SEQ ID NO:X and the 5' 10 polynucleotides of the sequence of one of the sequences delineated in column 6 of Table 1C are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of a fragment or variant of the sequence of SEQ ID NO:X and the 5' 10 polynucleotides of the sequence of one of the sequences delineated in column 6 of Table 1C are directly contiguous. Nucleic acids which

hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides, are also encompassed by the invention.

In further specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of another sequence in column 6 are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of another sequence in column 6 corresponding to the same Clone ID (see Table 1C, column 1) are directly contiguous. Nucleic acids which hybridize to the complement of these 20 lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, a polynucleotide sequence in which the 3' 10 polynucleotides of one sequence in column 6 corresponding to the same contig sequence identifier SEQ ID NO:X (see Table 1C, column 2) are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of another sequence in column 6 corresponding to the same row are directly contiguous. In preferred embodiments, the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C is directly contiguous with the 5' 10 polynucleotides of the next sequential exon delineated in Table 1C, column 6. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

Table 3

Many polynucleotide sequences, such as EST sequences, are publicly available and accessible through sequence databases and may have been publicly available prior to conception of the present invention. Preferably, such related polynucleotides are specifically excluded from the scope of the present invention. Accordingly, for each contig sequence (SEQ ID NO:X) listed in the fifth column of Table 1A and/or the fourth column of Table 1B, preferably excluded are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a is any integer between 1 and the final nucleotide minus 15 of SEQ ID NO:X, b is an integer of 15 to the final nucleotide of SEQ ID NO:X, where both a and b correspond to the positions of nucleotide residues shown in SEQ ID NO:X, and where b is greater than or equal to a + 14. More specifically, preferably excluded are one or more polynucleotides comprising a nucleotide sequence described by the general formula of a-b, where a and b are integers as defined in columns 4 and 5, respectively, of Table 3. In specific embodiments, the polynucleotides of the invention do not consist of at least one, two, three, four, five, ten, or more of the specific polynucleotide sequences referenced by the Genbank Accession No. as disclosed in column 6 of Table 3 (including for example, published sequence in connection with a particular BAC clone). In further embodiments, preferably excluded from the invention are the specific polynucleotide sequence(s) contained in the clones corresponding to at least one, two, three, four, five, ten, or more of the available material having the accession numbers identified in the sixth column of this Table (including for example, the actual sequence contained in an identified BAC clone). In no way is this listing meant to encompass all of the sequences which may be excluded by the general formula, it is just a representative example. All references available through these accessions are hereby incorporated by reference in their entirety

Table 3

cDNA Clone ID	SEQ ID NO: X	Contig ID: 745365	EST Disclaimer Range of a Range of b 1 - 2783 15 - 2797	Accession Numbers
H2CBG48	11			<p>AL536879, AL536880, AW974652, BF978951, AI761251, AI655763, AA307225, AA628063, AW043567, AW376300, AI693827, BE047125, AI129587, AI701013, AA651730, AW172361, AW339506, AW085916, AA457150, AA052951, AI582629, AV688972, BF820514, AI590194, AW085909, AA916242, AI000008, AA962570, N52070, AA293021, AI371342, BF891108, AA058439, BF946218, BF891008, AV689991, AV690900, AI458885, AI962506, H40784, AI364207, AA464514, AW994164, BF946219, AV656660, BF891112, AA336322, AA337109, AI824603, AA336509, AA336407, BF036975, AA337222, N46906, AA464515, AA319240, AA765507, AW361203, AA053434, AI928199, AW299270, AV713792, N50282, AA056762, BE708029, AW361192, W07762, AL513817, BE965014, AI866082, AL513723, AI689470, AI684244, AI866624, BF970652, AW024594, AL514691, BF525392, AL047100, AL513687, AI963763, AI925404, AL514473, BE9666388, AI634249, AI241901, AA580663, AL513553, AI584130, AV727963, BF868489, AI973288, AI499570, AI638644, AI745684, AI765323, AI583065, AI909697, BG058398, BE964967, AL514085, BE966547, AI889818, AI890223, AI473536, AL036187, AI521799, BE892325, AL514145, AL046466, AI636811, AI540179, AW262983, AL513779, AI345415, BG110192, AV761267, AL514493, BG030785, BE879336, AI590043, AV696866, AI417790, AI698391, AW088628, AL514359, AI916419, AI433647, AI690536, AI690748, AW081383, AL514497, AL513755, BE965732, AI514455, AW129264, AI382670, AI689557, AI357940, AI277008, AA761608, AW079334, AI884318, AL514047, AI493576, AI421903, BE967005, AI590227, AW105460, AI719817, AL037582, AL037602, AV682533, BF766531, AW161202, AI469505, AI491775, AW020397, AI744243, BE540578, AI953765, AW834282, BE966577, AL514867, AI635851, AW075382, BE962903, AL514871, AL514469, AL515195, BF309444, AV747571, AI873638, AI524724, AI440239, AL514899, BE967070, AI679550, AI345612, AL514457, BF039003, AA743354, BF792961, AL513911, AA631120, AW083374, AI284060, AI623179, BF791791, AL036705, AW827289, AI363741, BE9666927, AI288305, BF895218, AL514155, BE966579, AW088899, AI345416, AI267185, BE964999, AI359787, AW189415, AI538850, AI301710, AW008226, AI341690, AI611743, AW198090, AI620302, AI683606, AL513951, AW078712, AL046618, BE964726, BG164558, AI540674, AI884469, AI539771, BF724420, BF970436, AI567846, AI862024, AI627866, AI696570, AW073677, AI362522, AI679891, AI678446, AL513781, BF981785, AL079799, BF727091, AI567625, BE888257, BG104845, AL515235, AI627893, AI559619, BG036506, AW500379, AI089970, AI270039, BG031894, AI932739, AI539042, AW007309, AI367210, AI933783, AI434731, AL445590.4, BC006159.1, AL050155.1, AL390154.1, BC001655.1, AK025435.1, BC000077.1, AB060876.1, AF218000.1, X82434.1, AK026885.1, AF232009.1, AL389935.1, AL137476.1, BC000632.1, AB048964.1, AL080154.1, AK026762.1,</p>

H6EAB28	13	135222 7	1 - 1925	15 - 1939	T89998, A1937672, H86848, R74517, R52128, BE243519, AA224988, AA588111, T89414, AA976027, Z39380, BE869329, R48449, R72429, AA229997, AA308518, BF183288, AA229612, A1694870, AV755614, AV755613, T24832, AA229703, AA620967, AA594460, AA480941, AA480883, BF059107, AA278692, AV691613, A1197824, H65670, AA480992, AA480966, AC003070. 1.
					AL537848, BE796835, BE793657, BE793638, BF968748, BE727036, BF316464, BE728420, BF314482, BE868759, BE407252, BE409490, BE276749, BE386000, BF026545, BE871737, BE384252, BG235902, BE261749, BF125396, A1961321, A1001128, A1343334, AW135558, BE729783, AA777237, AA478021, A1623324, A1825954, BE220322, AL537847, AA232184, AA478177, BE220321, BE965762, BE276538, AA182540, A1085995, AA242851, BE621538, A1864561, AA308520, BG056114, A1872887, AA252149, D81546, H44644, R02178, BF093043, AA626640, BG149380, H43602, AA852700, AA243086, AA233362, R36915, D80941, A1687192, AA182585, A1648561, BF794171, AA852699, AA449104, BE386947, BE727929, AA776508, AA583629, AA252298, BG111945, BF448098, BE314222, AC004840.3, AF239822.1, BC002918.1, A1289131. 1.
H6EDF66	14	520498	1 - 526	15 - 540	AW245081, A1143992, AA495832, A1361951, A1090193, A1598190, A1380542, A1990174, A1859137, AA994262, A1350501, A1394639, A1086091, A1990481, AA293019, AW003834, AA976745, A1351614, A1202144, AA115762, AA253139, BE727402, R88936, N72164, AW237082, AW025153, R90773, A1766469, A1672360, BF718243, AA745682, AW134904, AA495776, AL119175, F23330, AA417706, AW274357, AW268196, R36266, A1913519, W00431, AA496881, BE252368, AA610858, AA417588, A1685216, AW072885, BF975689, BF690095, BF984194, BG033163, AA114066, AW474388, AA133537, A1693690, BF339469, BG166654, BG164558, AW078929, A1473536, AL119399, A1345688, AL042544, A1539771, A1288050, BF812961, A1472566, AA326898, A18663082, A1633125, A1698391, A1538564, A1915291, AW152182, AA248795, BF811804, A1889189, A1866469, A1270099, A1884318, A1933992, AW151714, AW051088, AW827289, A1611743, A1933903, BF814449, A1885520, A1435268, AW078574, A1049787, A1819326, A1539780, A1584140, BE540034, AL046466, AA905473, AA279795, BF970652, AA019328, A1887772, AW087934, A1570966, A1250627, A1492528, A1249962, BF871314, A1866608, BF822127, A1224027, A1628254, AW168503, AW191844, W74529, A1352274, A1589428, A1624693, A1242248, A1873638, A1801766, A1537677, BE907440, A1702073, A1916419, AW163834, BE965169, A1249877, A1963763, A1312542, AA641818, A1357996, A1684305, BF572734, BF856052, AW500379, BE965129, A1376872, BE875407, A1433157, A1932794, AW079409, A1610115, AW983832, A1537024, A1951950, BG031894, A1582932, A1587606, A1590043, AW129230, BF814360, A1888621, AV734591, A1273901, AW085786, A1673785, BE843239, AW169790, A1651840, AL037454, AL046595, A1640729, A1811344, A1520785, BF814357, A1473451, BG177717, AA743354, A1270429, AW118518, AL513901, A1580451, AW020397, A1559296, AW026882, AA502794, A1917963, A1540821, A1538850, A1270183, A1520859, A1475139, A1362239, A1923989, BF792469, AW167021, A1678446, A1745684, BF868927, A1582912, A1640704,
HABAG37	15	637942	1 - 640	15 - 654	

					BF222472, AI249946, AI590021, AI679891, AL046618, BF680133, AW188434, AI828574, AI625384, T69241, AW149311, AI690585, AI590227, AI630931, AI884469, AI281757, AI476478, AA835801, AI573032, AI500061, AI680162, AI567846, AI366900, AW081322, AI951868, AI583065, AI345745, AI536638, AI815232, AI434242, AW162214, AI659795, AI702406, AI038605, AW168795, AW080090, AI472536, AI659334, AW946864, AL043355, AV745810, AI866040, AI580190, AI583533, AI561231, BF812936, BE543089, AI654750, AI923370, BF812938, AC005786.1, AF218008.1, AC005787.1, AL389935.1, AK025092.1, AL354776.15, AL035067.2, AK025312.1, U66059.1, AC026464.6, AL162002.1, AC023880.5, AK026533.1, AB048919.1, BC008485.1, BC004264.1, AK026408.1, AF225424.1, BC005678.1, S77771.1, BC004370.1, AK025435.1, AF090901.1, AK026462.1, BC004349.1, AL136850.1, AL080159.1, AK027144.1, AL050149.1, AB047631.1, AL137547.1, BC004556.1, AL080148.1, AK000652.1, AL512750.1, AF260566.1, AF245044.1, BC003614.1, AL049382.1, BC002343.1, BC006494.1, AL122100.1, AK000250.1, Y14314.1, AL137256.1, AL050155.1, AL162083.1, AB047887.1, AL122098.1, BC001098.1, AL133619.1, AL050138.1, BC002733.1, AK026532.1, AB060912.1, AL049339.1, AK000418.1, AL080154.1, Z82022.1, BC007556.1, AK025484.1, BC009341.1, D83032.1, AL133645.1, BC002342.1, AF205861.1, AL353956.1, AL137488.1, AL161899.21, AL136622.1, U77594.1, AL110196.1.
HACBD91	16	637482	1 - 1431	15 - 1445	AI123694, AA203656, AV707802, BF575227, N77966, AW956121, N71852, BF732312, AI338999, AA704675, AI742966, AA176725, AV744696, AI039168, AA329423, AA680411, F10345, T85994, AV682639, AA731436, AV735262, AV733694, AA0505796, AW959998, BF793146, H79631, R00088, BF978632, BG034327, AV716953, AW955313, BG032189, AV717860, AV716893, BF244606, AV733654, BG030662, AI802907, AA528524, AA973692, AA658895, AV714250, AV718258, AV716004, BF029739, F26324, AW772717, BE909294, AA370595, AI392630, BF529817, AI914394, BE748127, AA975366, BF029799, AI126532, AA977864, R38577, AI093884, AW264528, AI351443, AA916014, AA359165, AA594324, AI682171, AA404535, BG034254, T75123, AI832970, AA973611, AI833308, AI814033, BE781781, BF035996, BF036344, AA88167, BE541776, BF109665, BE551387, AI268514, AV710503, AI709250, F33691, BF216659, F33502, BE467615, AV738506, BE503802, AV763934, BG110890, AV742881, AV710956, BF965198, BG033031, T90966, R02459, F32392, BF029956, BF690853, AV764373, BE738142, BF244383, AW772766, BF978393, BF030821, BE548289, N64163, BF576733, AW872492, BE218579, BE539011, BE042987, BF978138, BE217894, BF692527, AW419258, BF219313, BF244019, R02355, BF242775, AA340839, AW440167, F30529, BE748667, AA640120, BG179795, BF679132, BF382290, AI719390, R35603, BF240791, BF691038, AW009337, AA886535, BE738709, AI253328, AW268515, BF977850, H79632, AV764541, BF214426, BE184678, BE171856, BF382191, F12739, BF031722, BE564110, F21702, BF219100, F26311, F27624, F31646, F24066, F30253, F21442, BF030470, BF215493, AA365400, AV725369, BF243623, BF216495, F23622, R38445, Z20180, F23439, BF031636, AA340808, BF246303, F29361, BF212059, D19917, BF210763, AI720401, N58379, AA706899, BE737668, F37786, AC009289.8, BC000855.1, AF044957.1, AC008804. 6.

HACCII17	17	891114	1 - 1708	15 - 1722	AL538454, BF530920, BF530060, AI970528, AI860328, BF527064, AI798917, AL538453, BG054790, AI923543, BF219866, BF528175, AV752086, BF526803, AI800076, BF526264, AW206433, AI337330, AW245447, AW237083, BE858481, BE466614, BF437709, AI497639, AI160768, AW245805, AI131235, BE672804, AI160855, BF109500, AI675102, AI804002, BG060000, BF222422, AI982947, AI355974, AW590096, AI418181, AI312842, BF224013, AI088289, BG056127, AI332684, AI341205, AI654907, AI083806, AI798674, AI470925, AI190394, AW139187, AI092606, BF222526, AI291977, AI611140, AW135968, AW204680, BF106163, AW025331, AI167288, AI656880, BG058349, AA971379, AI399811, R72939, AA037774, AI150867, AI928634, AW302173, AI918209, AI350940, R73561, AA034204, BG152416, AI810527, AA621414, BF061361, AI783733, AI817644, H94482, R60154, T35689, BE504130, BF111371, BF725784, AI970869, BF056386, BF445420, AI925534, BF831443, AA885412, H49844, AW572977, BF939724, BF220095, R60153, F37217, BF525690, AI654502, AW189678, AA131356, BC002404.1, AF000959.1, AC000082.4, AC000071.2, AC000088.2, T69988, N39621, N46769, AA034265, AA918849, AA707092, AA758314, Z38200, AA772946, AI418724, AI420314, AI423722, AI423730.
HADA089	18	570689	1 - 1439	15 - 1453	AA937957, AA280310, AA169289, AW474052, AV760571, AW021583, AI801482, AI281881, AA521399, AA521323, AL044940, AW970896, AV760777, AL037683, AV757607, AA587256, AW956640, BE139146, AI805363, AL042420, AI434706, AA468022, AW956641, AA502155, AV759505, AV763122, AA828704, AW276827, BF827410, AV762067, AW673241, AI564496, AA613232, AA984708, AV762571, AV761745, F03525, AV760190, AV758600, AA774780, AA507824, AA483223, AI143242, AV762535, AF330238, AC006365.3, AC021188.6, AC006509.15, AC004072.1, AL121877.13, AL13321.11, AP001748.1, AC008848.7, AC009516.19, X54181.1, U04355.1, AL109984.14, AC005197.1, AC027612.6, AL157713.10, AC002985.1, AL357497.17, AC005082.3, AL391478.14, AP002534.1, AL135839.15, AL121934.17, AC002558.1, AP000513.1, AL354735.14, AC006511.5, X54177.1, AC005081.3, Z75746.1, AC007666.12, AC006064.9, AC006019.2, AL162505.20, AL356095.11, AF205588.1, AL161670.4, AL136179.15, AC016138.8, AC004895.2, AF196779.1, AP000512.1, AC008447.7, AF117829.1, AC006464.3, X54175.1, X54178.1, AL513366.11, AC004089.25, AL096712.20, AC008770.6, AL008629.9, AC090043.1, AL354932.26, AC004834.2, AC011464.5, AC007956.5, AC069255.18, AP001732.1, AC005015.2, U67828.1, AC010326.6, AP001725.1, AP000553.1, AL049849.1, AL022147.3, AC011520.3, AF049895.1, AC025280.4, U95740.1, AP001630.1, AC034193.4, AL445483.13, AC073136.6, AL138787.11, AC000052.16, AC007999.12, AL353739.4, AF192304.4, AC004941.2, AC018808.4, AC068533.7, X55923.1, AC012442.7, AC018695.6, AP000567.2, AL357560.11, AC010470.6, AC004971.3, AC003101.1, AL132716.6, AC016026.13, Z97989.1, AL109823.23, AL022322.1, AC010651.7, AC004019.20, AC007537.3, AC020584.9, AL355922.4, AP002007.4, AC011497.6, AC004158.1, AC018682.4, AP000963.2, AL021393.1, AL078472.3, Z83840.7, AC007021.3, AC006433.18, AL356863.11, AC073866.16, AC008569.6, AC009244.24, AL450342.14, AC007016.5, AC015982.9, AL121787.22, U67829.1, AL118506.27, AL359853.18, Z83826.12, AC090042.1, AL161747.5,

HAGAI85	19	381942	1 - 1738	15 - 1752	AC008383.8, AC025168.7, AL137077.31, AC003085.1, AL136123.19, AC012320.6, AL356915.19, AP000696.1, AL354828.12, AJ295844.1, AL445217.3, AC010328.4, AC015801.25, AL391827.18, AL109855.16, AL139421.11, AC009131.6, AC004913.2, AC010422.7, AC009506.5, AC022415.5, AC002470.17, AL121869.19, AC006330.5, AL133215.16, AL031431.8, AC010513.6, AL353588.25, U91326.1, AC073542.4, AC007220.4, AC007132.3, AP001726.1, AL133286.9, AL357558.6, AC022078.12, AP000047.1, AC011247.10, AC018751.30, AL034549.19, AP001724.1, AC008687.4, AP001415.1, AL163201.2, AC072061.8, AC008040.7, AC006515.7, X55931.1, AC005971.5, AL031904.1, AP001680.1, AP000017.2, AC004067.1, AC007845.12, AP001631.1, AC005006.2, AL137791.19, AC004166.12, AC004004.1, AL021453.1, AP001666.1, AF015720.2, AC011510.7, AC011479.6, AC007057.3, AC018828.3, AC040160.4, AF020803.2, AC035147.3, AL030997.1, AL161799.19, AC006947.2, AC000159.6, AL449106.15, AC021752.5, AC004965.2, AC012492.9, AB004907.1, AF312032.1, AF131215. 1.
HAGAM64	20	626997	1 - 2307	15 - 2321	AL526844, AL534504, AL532583, AL526885, AL534503, AL532762, BF791804, BF979873, AU139874, AV706645, AW952336, BF979324, AU139805, BE615117, AW189934, AU129651, AW572808, AU158184, AI613227, AW969259, AA854118, AI057339, AW029537, AI810068, AV725299, AI460229, AU151734, AI676226, AA450163, BF217638, AI242616, R76281, AI004063, AA450100, AI095551, H46944, W05356, AI075684, W31703, T86800, AI339293, R85337, AA468695, H94753, H46945, AA323897, R77461, R77559, R26135, H43527, R80736, AA772424, H60113, R63353, H12406, H12407, R85338, R76558, R26349, R63354, AI609126, R68089, R68131, R80737, AW103602, AA745911, H59459, AI122795, Z41708, AI248729, AI800670, AW798408, BF931590, BF986996, BF735086, BE929484, BF903415, AV724914, U83461. 1.
HAGAN21	21	102695 6	1 - 829	15 - 843	BF925125, BF925123, BF925124, BF925118, BF925117, BF925120, BF925126, AA564576, BE159227, AC009466.17, AP002853.3, AP000880. 4.
HAGBZ81	22	456414	1 - 1368	15 - 1382	Z69655.1, AL391987.15, AC004841. 2.
HAGDG59	23	534165	1 - 1720	15 - 1734	AL532808, BF356940, T26989, F07451, T26988, BE089554, AV753931, AA176259, Z38391, AI652752, AU123074, AU132666, AV753734, BE876059, BF911695, AV755178, D61463, AI267311, AW387165, AW178928, AW374679, AW374832, BE089568, AW374731, BF700420, BF914304, BE173287, AW178920, AW751520, N83868, AW387129, BG170148, AW374762, AL120973, BE933886, AI915992, BE004012, AF224469.1, AF306765.1, AF184241.1, U03109.1, AF289489.1, S83325.1, AF224468. 1.
					AV694248, BE895909, BE903848, BG027942, AV651246, BG109867, BF240140, BF217526, BF669125, BE779936, AV650099, BF971092, AW875350, AW956342, BF107182, BF697022, BG166672, BF030619, BE881774, BE548671, BF247518, AI888053, BF667451, BE872808, AI768748, BF792803, N37046, N23484, BE872350, BF239058, AW664126, BF107464, W88681, AW338066, AW952476, AW402833, BE971415, AW853145, BF968304, AI636324, N24759, BF665132, BF213364, AA830565, AV697089, AA167203, AW023148, AI815125, AI685119, H98763, BE465545,

HAGDI35	24	597444	1 - 1343	15 - 1357	<p>AW853521, AW405572, AA481430, AW604402, AA481434, AA223067, AA902413, AW578436, BG258700, AI954984, AA045833, AI567716, BE856103, AA577610, H42133, AA553538, AA470843, AW467047, AW169016, AI961753, H38614, AA835545, AI262411, AW192401, AI193508, AA576473, AV660930, AW262909, AA263040, BE927225, AA481670, BE782154, W88620, AA394254, BG261374, AA730743, AA653560, R80477, AV651327, BF572366, AW193089, BF904780, AW470979, BF904779, AW295546, AA045967, AA329460, H42134, AA213836, R23904, BE243520, BE693582, AI263974, AW293723, AA481674, H61494, BF674778, R23903, R80672, BF032805, R61171, N79745, BF382094, H38856, AA328661, BF902314, BF243422, R27506, BF894060, T72506, AW361405, H62468, W07107, AI468319, AA362581, R27793, AW853797, AW337877, AW075817, BF031795, BE866675, BF905580, T82403, R27885, AW339053, AA377009, BF791479, AI708354, AA485696, BF239244, AW051074, BE866177, AI497897, AA485827, AW273624, BF905573, BF205089, AW022407, AI678575, Z21560, BF238897, BF699925, BE926278, BF239919, AW836245, AF126780.1, BC008650.1, Z64479. 1.</p> <p>BF308663, AW993425, AW954450, AI692203, AW992918, AL522858, BF110568, W72362, AL134648, AW993463, N49936, AW510670, BF528906, AW006483, AI693954, BF515443, AI887176, AA535442, AI818606, AW168954, AI863099, AW291090, AW004709, AI360443, AI871700, AW006630, BF061393, AI470191, AA594619, AI199309, AA594612, AA679412, AI076538, AI298920, AI763185, AA743895, W61171, N71964, AI683722, BF752331, AI475627, AA625964, T66225, AI631360, BF445267, N90078, N52716, W74041, AW993254, N25346, AI432537, AA826113, T48369, AI336067, BF431794, BE671301, AA774516, H15425, BF438813, AA830282, AA527245, AW150654, AW973902, AI919260, W38528, AA514881, AA928383, N99697, AW770540, F09904, AA848116, AW953438, H73840, N95112, Z39718, AA723406, W25793, F02624, AA093707, BE047849, AI350675, T97677, W61133, F02974, AI912353, AA827092, AA380688, T97676, AW270105, F12279, Z43661, F06328, AA668886, AA628658, AA830323, T48368, AW517354, N66000, BF833202, AW118678, AA351923, AA093722, AW189868, AW086208, AA767210, BE888973, BE841233, W58358, BF507840, AL522859, AW844212, N56545, H15480, AL513693, AL355334.26, AL391137.11, AL353957. 1.</p>
HAGFG51	25	823509	1 - 1299	15 - 1313	
HAGFI62	26	704425	1 - 989	15 - 1003	<p>AI693333, AA774471, H49659, AA009946, AW664812, AI217416, R56893, T88930, H44134, R67277, F10016, R52911, R39072, D61015, AI972242, Z44064, BF790840, AI090826, F06072, Z38995, R35532, AF131817.1, AF198490.1, AF181450. 3.</p>
HAGFY16	27	778820	1 - 1949	15 - 1963	<p>BE613319, AV687447, AV725712, AV687625, BG166531, BE612728, BG114876, AW952404, AV686519, AV725638, AI061630, BE877777, BF055022, BF692350, BF439548, AW372569, BE866270, BF967994, BF732575, AV706186, BG054984, BF690981, AA813278, BE876393, BF206792, AW160677, AV728247, AI612729, BF210620, AW167859, AW167862, AA521082, BF698977, BE645016, AW753532, BF195583, AA161332, BF665995, BF446480, AI887683, AA843967, BF445077, AA447934, BE348758, AA525839, BE881059, AA843171, BF673423,</p>

AA402367, AA910679, BF195330, AA037122, AW068627, AI816253, AI869290, W56256, AI806813, AI912708, AW156905, AA779099, AW206294, BG168894, N35917, AA781082, AA496466, AW022886, AA873496, AW003760, AA992894, AI168731, BF028133, AI091239, AI422091, AI802199, AA287895, AA774263, N22752, AA056053, BE042949, AA843277, BF001600, AA283859, AA287736, AI057601, AI678620, AW403982, AA984140, AA907413, AW275342, AI091181, AI361356, BE218417, BE327200, AI290167, BF572327, AW157133, AI929639, H15827, N94537, AI685261, AA931689, W17196, BE538941, AI027113, W33009, AA293343, AI079727, N30220, AV749347, N92441, W23456, AA410485, AA935683, D58802, N27027, D81853, H99819, N94329, BE702242, AA452710, BE383297, BE218532, AI816334, BF681161, AA258458, BE077323, AA910558, AI128706, AA664059, AI446094, AW161562, BE673987, AA872758, BF762393, AA861311, N59261, BE167341, N34534, AA846407, AA918516, AI004733, AA911982, AW516664, BF762409, AA973796, AW073424, AA448868, AA857543, AA399445, AA515285, BF692523, R90917, AA399423, BF036554, AW470953, AI566161, AA725042, AA872812, T63367, AA995135, AV684142, AA643728, AI027067, AA293329, AA085090, R56184, BG109166, AA577338, H23642, AV650608, BE928331, H41386, R64440, AA029562, H13310, W46630, AA114922, AW513259, N57112, AI423456, AA744562, AA993782, AW160789, AI245725, AW162091, AA744564, N40152, AA029728, Z43644, BF436213, AA837702, Z45519, AV689458, AA620561, AV686647, AI973249, AI093848, AA410303, AA602387, R32391, AA421573, AA258388, AA922986, BE564509, C14582, R12614, AW083148, N36220, AI499779, AA055763, AI571822, AA939289, R90813, H16135, F06244, AW162345, W92571, N89859, AI027262, AI149386, AW023549, R63828, AA311835, H38655, AW517389, AA782100, AI348632, AW015099, T54934, AI826301, AI570545, AI207050, AI360861, W30811, AI028088, AI768693, N68929, AI307614, AA112870, AI343572, AA724357, R32390, AA807259, AI744258, AW276195, AA055962, R42373, AA613126, AI167826, R18327, BC004317.1, AC004752.1, AK025312.1, AL583915.1, AL353956.1, AL122045.1, AK025209.1, AK026480.1, AL389935.1, AK026542.1, AF058921.1, AL136790.1, AF159615.1, AL122050.1, AF125948.1, AF217982.1, AL049382.1, AF353396.1, AB063100.1, AL162002.1, AL080163.1, AJ299431.1, S78214.1, BC003695.1, AK000450.1, AF358829.1, Y16645.1, AK025414.1, AF321617.1, AL136928.1, BC002454.1, BC000556.1, AL353940.1, AK000718.1, AL137429.1, AL136844.1, AL512689.1, AL442082.1, AK027193.1, AF061573.2, AL122123.1, AK000618.1, AF217966.1, BC004958.1, S76508.1, AL137537.1, AK025375.1, AB047904.1, AL133665.1, AL137547.1, AL080159.1, BC006480.1, AK026885.1, AL117460.1, AL110158.1, AL050116.1, AL136893.1, AK025465.1, AJ012755.1, AK026550.1, AL133557.1, AL389939.1, AL049452.1, AL137533.1, AL133113.1, AF106862.1, AK027204.1, BC008365.1, BC006332.1, AK000418.1, AK026642.1, AL049314.1, AF143723.1, AK026865.1, AK025378.1, BC009033.1, AB060826.1, AB052191.1, AK026746.1, AK025541.1, AL137550.1, AF090901.1, AL110222.1, AL389982.1, AL136799.1, S61953.1, AF026816.2, AB048953.1, AL137271.1, AB055352.1, AL137711.1, AB050431.1, AF274348.1, AL096744.1, AF274347.1, AL117432.1, AF271350.1, AK026408.1, BC007326.1, AL136850.1,				
---	--	--	--	--

				AK026583.1, BC001967.1, AB047878.1, AB048975.1, BC007567.1, AB060839.1, AF155827.1, AL136845.1, AL137294.1, AL136882.1, AF242525.1, AF090934.1, BC003683.1, BC002365.1, AF090943.1, BC006440.1, AK026744.1, AB056421.1, AF202636.1, AB060916.1, BC008485.1, AF090903.1, AK024538.1, AF090896.1, BC005678.1, D83032.1, AB049848.1, X53587.1, AB055361.1, BC004530.1, AB060211.1, AL136540.1, BC002523.1, Z37987.1, BC007198.1, AL137558.1, AL136780.1, BC008078.1, BC002844.1, AL136892.1, BC002733.1, AK027868.1, AK026532.1, AK026591.1, AK000652.1, AL122110.1, AF245044.1, AB050410.1, AB048913.1, AB048919.1, BC004951.1, AL050172.1, AB056420.1, BC002631.1, BC003682.1, AL133075.1, AK025524.1, AL133072.1, M92439.1, AK026462.1, AL133560.1, AB060912.1, AK024992.1, AK025967.1, AK026649.1, AK026855.1, AB047623.1, BC004925.1, BC004899.1, AB060897.1, AL117583.1, AB060863.1, AL117416.1, AL512733.1, AB060929.1, BC001964.1, AK025435.1, BC008037.1, AB056809.1, AB056372.1, AL162062.1, AK026627.1, AF061795.1, BC002466.1, AF151685.1, AF252872.1, AK026927.1, AL023657.1, AL157431.1, BC006287.1, BC004264.1, AL137488.1, AL050155.1, AF056191.1, AL137292.1, BC003687.1, AK027114.1, AK026504.1, AL049300.1, AL049938.1, AK026630.1, AL136792.1, AK027144.1, AL512765.1, AL050024.1, AK024594.1, AL137705.1, BC006509.1, AB062942.1, BC008899.1, AK026959.1, BC007456.1, AB048974.1, AL162006.1, BC004244.1, AL133014.1, BC004215.1, BC003122.1, AL359618.1, AL136805.1, AF207829.1, AK027173.1, AF078844.1, BC004905.1, AL117648.1, AK027113.1, AL049460.1, AK000247.1, AK000323.1, BC002839.1, AL137478.1, AL133077.1, U39656.1, AB063008.1, AK026762.1, AK026784.1, AL117629.1, AB055303.1, AL359601.1, AB055368.1, AF090886.1, AB060887.1, BC003548.1, AK027142.1, AL137256.1, BC007346.1, AL080148.1, T54768, T63693, T91023, T84597, R13763, R20519, R25031, R43789, R53025, R20519, R43789, R55911, R81848, R81849, R90812, R90918, H53640, H53684, H86289, H97448, N25711, N43983, N59141, N75178, N76730, N78834, W31472, W31935, W35396, N89770, AA018416, AA019585, AA122341. AI688902, AI983921, AA843874, AA745961, AU150602, BG169215, AW571697, AA581433, AI6851116, AW190486, AA152091, AI927861, BG059728, AI811494, AW089655, AI924175, AU118990, AI872415, AI858607, AI610776, BE044603, H97952, AF063514, AL137994, AV719347, AA189081, AW177120, AL133942, AW090739, AA767353, AW167319, AU145663, AA724159, AA493998, AA773359, AI367384, W49501, AI925647, AI334099, AA631430, AU143906, AI874256, AI264673, AI887321, AA160519, AL119355, BE046447, AW468887, AI749571, AW177226, AI761656, BF882284, AI801377, AW177317, AV726924, AU121759, AL036881, AI082077, AW177231, AI088796, AI675848, T16214, AI818151, AI627862, AW994225, AW084901, AW177264, AI250812, AU157470, AV730063, N64574, AI625127, BF056069, AW073349, AI735074, AI590151, N24958, AW813744, AI963795, N76274, AI732743, AI560839, AA174085, C06012, AA085707, AI811854, AA601264, W03759, AW090210, T69719, AW177237, AV699636, AI570877, BF823687, AI418614, BE379085, AA152017, BF436023, AA953572, AI433018, H91008, BF930080, AA709024, N79242, AU145674, H64113, AV720543, AI346802, AI568919, AU146451, AA287329, AW242205,
HAHDB16	28	635412	1 - 782	15 - 796

					<p> H90881, AW242735, AA778304, AI034217, AU145383, AW589529, AI628043, AI027421, AW235478, AI860964, AI499811, AU146974, BE148908, AI375534, AA946637, AA807609, AW157413, AI683685, BF760502, AW589501, W87732, AA524883, W58442, AA678653, AI591192, AI189033, BF439824, AA470572, AA136637, M62281, AI632138, R48563, BE247178, AI272961, AI376984, AI524521, AI197934, AI025602, AW874038, AU143935, BG235936, AU144339, AI955464, AA782144, R80440, R94240, W33199, AI973178, AI891085, AI095849, BG059067, AL041411, AI358417, AI734140, AW838708, BE673863, R91915, N79835, BF888049, AW473240, AI091583, BF063798, AU147980, AA136576, BF875698, AL047920, AI290861, AI051363, AI917243, AA825161, BF594091, AI453790, AC008496.5, AL390035.10, AJ229041.1, AP001724.1, AL163267.2, AL121767.6, AC016759.11, AL390838.26, AC007671.7, AL109799.6, AP001683.1, AC024057.4, AC087187.1, AC006007.1, AC007683.5, AP002026.1, AC069223.15, AL449104.5, AC016925.15, AL354913.11, AC078843.2, AL135926.12, AC002449.1, AL450340.13, AL022401.1, AC012000.3, AL391986.12, AL078591.18, AC009320.7, AC013448.7, AC007321.2, AL034369.1, AC012081.16, AL121823.12, AC002300.1, AL590404.5, AC040171.3, AC005610.1, AL445306.7, AL359914.14, AL031319.5, AL353684.8, AL162759.4, AL049565.3, AC001231.2, AC008170.2, AL031183.4, AC016568.4, AL451049.11, AL049588.11, AP001729.1, AC010142.4, AC083861.2, AF020802.2, AP000810.5, AL163282.2, AL139115.5, AL022397.1, AC003969.1, AL445468.8, AC018645.4, AL355593.21, AL159986.21, AL358341.3, AL136147.10, AC079147.5, Z84487.2, AL132821.17, AC022710.10, AC073348.8, AC006206.3, AL365204.11, AL445465.10, AC005243.1, AC067945.4, AL589786.8, AC012323.7, AL132715.3, AJ225782.1, AC090043.1, AC079905.28, AF274857.1, AC004066.1, AL355294.14, AC010133.4, AP001690.1, AC009274.9, AC005823.1, AP001331.1, AJ271736.1, AL136133.14, AL031671.12, AC063947.30, AL161450.14, AL009172.1, AL138479.4, AC018469.5, AL359986.15, AL133417.10, AC087083.2, Z97196.1, AP000457.3, AL360270.18, AL033392.5, AC023134.5, AL158201.19, AC079177.21, AC004820.2, AC024093.46, AL359380.16, AC006578.5, AP001669.1, AC087312.8, AC006365.3, L29074.1, AL359204.10, AC011912.7, AC073323.5, AL121933.15, AC007748.2, AL359922.10, AP002848.2, AL133553.9, Z72001.1, AP002982.2, AC078777.15, AC009037.6, AL359077.10, AP000687.2, AC007482.7, AF235098.1, AC004617.2, AL591046.4, AP003479.1, AC006249.1, AL355357.13, AC005951.1, AC004782.1, AL121841.5, AL009174.1, AP002532.1, AL135790.7, AL133467.4, AL359265.8, AC007037.4, AF042091.1, AP001817.2, AP001672.1, AC026164.5, AL355478.16, AC020987.8, AC023469.6, AC021713.7, AC068660.3, AC083860.2, AC012446.2, AC010482.7, AL355888.3, AC011230.3, AL133480.9, AC026203.3, AP000650.4, AC090710.16, AL590682.9, AL121788.17, AC004998.2, AC026202.6, AL137248.21, AC025439.4, AL163280.2, AL391623.13, AL354828.12, AL050309.4, AC018951.8, AL109755.14, AC019050.4, AC008069.3, AC005859.1, AC002288.1, AC002074.1, AL136520.3, AC003984.2, AL096829.17, AC034242.5, AC010528.8, AL163952.5, AL159982.17, AC005883.14, AL513342.7, AC002367.1, AC083865.2, AC008486.6, AC008716.6, AL035411.27, AC006516.10, AL157902.6, Z92540.1, AL355375.17, AL390836.12, AL390857.7, AC003958.1, </p>
--	--	--	--	--	---

						U80459.1, AL021937.1, AL034377.1, Z75741.1, AL158147.17, AL359693.11, AC010651.7, AL391384.18, AL390882.12, AC000114.1, AC026191.3, Z99289.1, AL450338.5, AF235093.1, AL050306.5, Z72519.1, AC018714.4, AL139421.11, AL121986.12, AL139002.18, AL449265.13, AC020704.5, AL271735.1, AP000857.4, AC008250.23, AL355504.17, AL354857.13, AL359438.19, AC012603.6, AL049834.3, AL121995.12, AL360219.18, AL589946.4, AL391379.12, AC011998.8, AC024095.13, AL442203.12, AL354858.16, AC022081.32, AC073148.7, AL450347.5, AC002556.1, AL158016.15, AL121782.9, AC005406.2, AC073273.9, AL445493.8, AP001831.4, AC012653.8.
HAHDR32	29	635357	1 - 1242	15 - 1256		AW961789, AL278626, BE856740, AL741753, AW028042, AL140668, AL095493, AA044732, AA577689, AW029335, AA044769, N93590, AA053971, AL204064, W03843, C03899, AL027848, BF92912, BF675682, AL074523, AA523465, AA347782, AL190976, AW170748, AL066686, AA345846, T86306, AA347781, T86404, AV710766, AA034459, R15471, N86784, AA448615, AA091937, AL086872, AA090967, N89145, Z21820, AA095754, C03190, C03750, AA094439, N55992, N56032, R58248, R45879, N75018, AA090605, AA216219, AA247579, AW800864, AA321320, AA249880, F30220, AA249861, AF204173. 1.
HAIBO71	30	490848	1 - 738	15 - 752		AL767324, AW976385, AL121194, AA972628, AL095851, AA743343, BE566411, AF118928, AW366882, D20570, AC009802. 13.
HAIBP89	31	727543	1 - 2229	15 - 2243		AL519706, AL526798, AL525802, AL525691, AL522375, AL525839, BE792809, BE743896, BE796567, BE274399, BE260643, BE543107, BG030916, AV714392, BE889610, BE277440, BF527074, BG110983, BG181079, BF027018, BE264922, BE386448, BE382754, BE407284, BG113064, BG032444, AW991399, BE884015, BE772873, AL309611, AA442698, AW249227, BF310578, BE312050, AL421417, BF685976, BE259606, BE618656, AL522376, AW248427, BF970944, AL300569, BE564324, BE207989, BE387042, BE261799, AL531714, AL884919, AW005650, BE061923, AW960504, AW601219, BF342013, BF848073, AL525736, AA564704, AL089642, AL040087, W60773, BE207992, AA903950, AL309614, AL085644, BF347393, AL526831, AA258978, AA009753, AL419210, AA216411, AL865848, AL683537, AW117839, AL206510, AL519707, AL620366, H58361, BF752057, AW373946, BF752053, AL520851, AL525315, H422973, W42711, AW601221, AW016488, H08339, F22598, AA494395, AL005664, AL372774, H58750, AL565541, AA778118, AL828095, BE796020, AL225112, AA576831, BF347545, AA971475, AL339860, W42904, AL096947, W60487, AL243479, AL961803, AW780312, AA449981, BF760874, AA706303, AA975280, BF796645, AL126822, BE796322, W57667, AL096594, AA917878, T16862, H94211, H24045, BE718404, BE831302, H42902, R08029, F11443, F09106, R08078, BE718388, BE718374, Z43495, BF846294, BE718393, BE718373, BE831316, BE831321, AL446598, BE718398, BE718392, Z39564, BE831301, AA608866, AL245647, BE718387, BE718386, H08338, AL564884, BE718381, AA301909, BE718412, BE718462, BE718376, BE718450, T69855, BE718396, H80027, BE718385, BE718378, AA135410, BE718469, BE718384, BE718433, BE718463, BE718416, BE718439, BE718440, BE831330, AL091920, BE718406, BE718461, BE718474, BE718473, BE718391, AW247973, BE718428, BE718421, AA889882, BE718468, H24152, AL472790, BE718464, BE718414,

					BE796664, BE170203, A1567456, BE718434, T34673, BE535472, AW768533, BF684007, BF983562, AW603147, BF764766, BE718372, BE706857, BE718427, A1698197, BE301688, H80028, BF755901, BE545526, BF311070, BE831325, N99825, BE408007, AV748817, AA330823, T16863, AA496030, BF528120, BE618415, BF835449, BE867723, BE718371, AA577513, A1275679, BG258831, BE140382, BE718453, A1758601, AW073256, AA247329, BE718452, BF035652, BF350213, A1885794, BE718443, BE718370, BE264666, AA135816, BE718448, BE903062, BE718441, AA403264, BF033582, BE299203, BE718436, AA258159, BE718451, BE297450, BE718471, BE298268, AW410472, BE718438, AA094849, BE410972, BE718467, BF354955, BE718409, U83557, BE905907, AC005214.1, N70685.
HAICP19	32	422672	1 - 1610	15 - 1624	AL533390, AL529681, AL528191, BF966576, AL523718, AL528190, BG120879, BF115284, AL529855, BE785817, BF026199, BF966448, BG114227, BE386416, BF115429, BF304689, BF304827, BE728367, BE793198, AV704155, AL529854, BE260405, BF305469, BE789342, BE297311, AW993505, BF316927, AW993825, BE277343, AW993830, BE265484, BF727063, AW960096, BF831956, A1743647, AW965178, C17555, BF838669, A1923650, A1860279, BF057404, AW005358, A1146421, BF928251, A1093908, BF747949, BE047374, BE813316, A1769656, AA605064, A1241016, A1148817, A1318082, W31773, AA565734, A1630731, AA843395, AW025017, A1566682, BF955698, AA506224, AA749014, AA827318, AW134754, N31961, BE774133, F36487, AA346026, T49220, AV750102, W04672, F31348, N31991, A1827206, A1630730, T49219, BF990595, A1678457, AA879426, AA120831, AA948142, AA345290, A1685001, BG007518, BG011225, AA120830, BE774243, BG004311, BE073338, BF155353, T39496, BE774391, BG007508, AW374473, AJ299442. 1.
HAIFL18	33	676933	1 - 865	15 - 879	
HAF57	34	823516	1 - 2747	15 - 2761	AI670135, AI460009, AI375542, AI338350, AA362719, AA482775, AW963333, BE160727, A1282511, BF339636, AW022897, AV757341, AV731764, AW274925, BE504746, A1254779, AW408047, AW407578, AV734583, AV731604, AV731603, AU121168, AL121904.13, AP001711.1, Z85986.1, AC009267.15, AC011485.6, AL354928.9, AP000960.2, AL132768.15, AC007358.2, AC005058.1, AL049795.20, AC005245.1, AC034193.4, AC005971.5, AL034406.1, AC002310.1, AC018808.4, AC002299.1, AL354815.10, AL121897.32, AP001705.1, AC083863.2, AL158040.13, AC008770.6, AL121601.13, AL360080.21, AF053356.1, AL138725.19, AL139801.17, AC008736.6, AC010422.7, AL139009.14, AC020908.6, AF130342.1, AC006288.1, AC010494.4, AP001688.1, AF228703.1, AC005562. 1.
HAF69	35	638516	1 - 741	15 - 755	BE262907, AW503376, AW503644, BF982382, BE079288, AW504239, AA701415, BF315343, BE277664, BF921555, BF736464, BF756620, BE720223, BE815902, AA490675, BE930704, AW971745, AW804686, AW392670, BE695785, AW861944, AW604723, AW877209, AL119483, U46351, AW858526, AW858525, AL042984, AL119497, AL119324, AL119319, AL119355, AW500561, U46349, AL134538, AL119457, BE705903, BE705906, AW577135, AW372827, AW384394, AW861889, AW858455, AW363220, U46350, Z99396, AL119484, AL119363, AL119391,

						U46347, U46341, AL119443, BF868687, AL119444, AL119341, BF868697, AW604726, AL119439, BF868684, BE705905, AL119522, AL119396, U46346, AL119335, AL134531, AL134533, AL037205, AL134920, AL134525, BE705904, AL119399, AL043029, AL119496, AL119418, AW861954, U46345, AL043011, AL042614, AL042975, AL043033, AL042544, AL042965, AL134542, AL042450, AL042542, AL043019, AL043003, AL119464, AL042551, AB028986.1, AB026436. 1.
HAIJBZ75	36	618530	1 - 2075	15 - 2089		AL529012, BE440014, BE546526, BE908087, AL037642, BE784646, BE617041, BE619152, BE791490, BE257606, BE962354, AW069180, BE740246, BE743316, AV701495, BF793697, BE410370, BF589487, BF034893, BF438638, AA442426, AA307880, BE621319, BE617390, BE299387, W46237, AW149792, BF197170, AA459238, BG255347, AW967185, T70170, BF679079, AI038975, AW008086, AI363208, BE207335, AA622048, AI347908, AI089610, BF038813, AI090281, AA463308, AW239176, BF689996, BF155465, AW169069, AI360030, BF155458, N20554, AA418177, BF844135, AI206446, AA677846, AI078405, AI281033, AI619944, W46238, AA716397, BF155444, AI363209, BF844120, BE816417, H57560, AA781638, AL529011, AA417926, AA725052, AA232141, AI245901, AW967343, BE814103, H70103, AW576723, AA587473, H57559, AI674249, AI184096, AA360949, Z45980, AA316453, AA300586, AW753961, N29266, BF879123, BE843416, AA380017, AI371374, AA404562, Z41593, AW197868, R19820, AA911964, AL526898, AA347813, Z43143, AA243103, AA633085, AA256621, AL526862, H16339, AA382930, BE065656, BE720795, AA907215, AA301927, T23530, BF037167, AA545811, AW578884, H69686, BF088878, R05400, BE766771, R08535, AA300594, AI887107, AI382910, AA25276, AA226403, AI868215, AW883612, AW800073, BE931847, BF690072, BG106304, AA709274, BE715584, AW380609, BE172905, BE619715, AW859456, BE715507, AW591554, BE939029, BE939020, BF736794, AL044317, AI820826, AA808498, AA490686, AI820767, BF677125, AW795338, AW795199, AW576726, R29190, BE763875, AI869467, BE832738, BE313356, BE832684, AA234630, BF764590, AI921710, BF155825, BF155822, AW879422, BF815725, AW934761, AA872519, BF793670, BE645187, AL050022. 1.
HAMFK58	37	647105	1 - 771	15 - 785		BG166755, BE797428, AL529398, AW439814, BE966473, AW026131, AW149540, AU148440, BF940933, AI608873, AI669338, BF331001, BF751518, AU152852, AU153427, AW771147, AW474975, AI860693, AI161399, BF031508, AA196512, AA767364, BF243271, AA573918, AW105335, BE538371, AU152980, AI860554, AI961324, AW576719, AI090203, AI421437, BF184939, AI564597, BG171613, BG252183, AA640452, AA553686, AI378739, AI951227, AA640792, AA523621, AW007941, AA159330, AA805371, AI141295, AA663960, AI078330, AA582142, AI344701, BGO004337, AI891016, BF804222, BF129108, BE887740, BF344072, AI890998, AI248848, AA652054, R91906, BE906934, AW105523, W44400, AW340747, AI400158, H58083, AA146834, AW337916, BE939699, AA639362, H69284, AW088381, R52376, AW969996, AW967822, AA587731, R20938, AI751024, R78105, BF804214, BG249967, AU156032, AA772174, BE769648, AI588839, AI905475, D63059, AI783915, BG110403, BF154795, AI520663, AA062655, AW269943, AW868901, N70292, AW868763, W74046, BE906817, BF800347, BE171159, AA481220,

					AU135425, BE393139, H39706, AW877209, W44623, AL134524, AL119324, AL529399, AL119457, AL119399, AL119443, AL042544, AW804686, AW392670, U46349, AW861944, AL119418, BE695785, AW372827, AW971745, U46341, AL119319, AL119363, AL119464, AW604723, U46346, AW858526, BE705903, AW363220, BE705906, AW858525, AW577135, AW384394, AW861889, AW858455, AL119391, AL119497, AL119484, AL119496, AL119341, AL119355, AL134518, AL119335, AL042965, U46350, Z99396, AL134528, AL119444, U46347, U46351, AL119483, BF868697, BE705905, AL119439, AW861954, U46345, AL119396, AL134538, BF868684, AL119522, AW604726, BF868687, AL042614, BE705904, AL037205, AL042970, AL031710.11, AE006639.1, AK023154.1, AB026436. 1.
HAMGG68	38	731859	I - 1444	15 - 1458	AW973341, AW974201, AL041477, AW471262, AV696883, AI799683, AI983869, AA579632, AI763280, AI962918, AW962479, AA919175, BE467860, AI694808, BE671481, BE670142, H97854, AA190313, AW608357, AV763623, AI656460, AI218288, AA057842, N39132, AA977897, AI907444, AI819548, AI698748, AI221889, AI300453, AA554290, BE327102, BF510243, AI366844, AI208651, AW341424, AW517375, AI092422, AI458704, AW770918, AA322568, H97652, AW058433, BG055320, T84069, AA587633, AI699024, BF881447, AW873347, AA397560, W46809, AI969771, AA807704, AA367835, R61770, AI819419, BF812696, BE882869, AL121039, AI702049, AA557945, AW148821, AA569220, AW118842, BF790866, AI567676, AW021674, AV683406, AI884404, BE875478, AW043803, AA935827, BG180320, BG059139, AI636422, AW265468, AW243817, AW162314, AW157128, AI439525, AI890283, AV743869, AW979200, AA805879, AW072963, AW162332, AI434103, H86399, AL134524, AA112864, AW576388, H47461, AW410844, AW192930, AL138262, AI445699, AI572680, BE049409, AV758849, AW029626, AW675677, AW575808, AU146789, BF725436, AI828721, BE045167, AW995605, AI860423, BG250794, AI888050, AI064968, BE065048, AV756809, AI547110, AV759204, AA084320, AA280886, AI028148, BF882222, AW662484, AA021061, AA349923, AW473160, AI732690, AW152451, BG059924, AA330549, AW328185, AW839858, AA604601, AW338376, AA171400, AW970856, BE747923, BF882223, AA218684, AI889177, AA661583, AW510403, AI150934, AI312614, BF901147, AI754926, AI620666, AI254267, AW275432, AW151848, AA101744, AI114494, AE006639.1, AL031009.1, AB037847.1, AL138724.12, AC016772.8, AL035455.30, AC002430.1, AC007384.3, AC004765.2, AL121594.6, AC005330.2, AC005399.19, AL121601.13, AP000952.2, AL139316.5, AC011467.7, AP001670.1, AL161747.5, AC006039.2, AP001872.3, AC024563.4, AL354751.7, AC006329.5, AC006697.4, AC008008.2, AL138756.23, AL024498.12, AE000658.1, AC005003.2, AC011510.7, AC005519.3, AL050318.13, AL160471.5, AC009506.5, AL138729.11, AC005000.2, AP000349.1, AC068533.7, AK000471.1, AC010328.4, AC007050.25, AC004400.2, AL121928.13, AC027124.4, AC004067.1, AC019205.4, AC010724.6, Z73979.1, AK027858.1, AL118520.26, AL035684.25, AC008736.6, AL139113.21, AL035420.15, AL590762.1, AC010976.5, AC005833.1, AP000503.1, AL354696.11, AC005253.1, AL445184.11, AL109952.15, AC005837.1, L78833.1, AC011485.6, AC008622.5, AL033519.42, AF134726.1, AC027689.10, AC018904.6, AC007011.1,

					AC004890.2, AC011247.10, AC007620.30, AC006137.2, AC005696.1, AC007736.3, AC002070.1, AC022432.4, AL137800.12, AL354808.24, AC010319.7, AC008891.7, AC005913.2, AC008264.10, AP000257.1, AC004883.2, AL355543.13, AC003041.1, AL122020.5, AB028893.1, AC011295.3, L44140.1, AL021391.2, AC006449.19, AC005994.2, AC004383.1, AC003043.1, AC015982.9, AL031281.6, AC010742.4, AC002350.1, AC008795.6, AC083884.6, AL034420.16, AC010271.6, AL512310.3, AC006241.1, AP000098.1, AP001745.1, AL161757.4, AC020956.6, BC004943.1, AC006145.2, AC011464.5, AC004975.2, AC006385.3, AC009330.5, AJ009616.3, AC007240.2, AL121652.2, AL022315.1, AC011480.3, AL109935.39, AC008655.6, AC012354.8, AC002400.1, AC010553.6, AC034235.4, AC004166.12, AB025285.1, AL133448.4, AC025438.5, AC091118.2, AC020916.7, AL136228.8, AC018711.4, AC005209.1, AC008649.6, AL008582.11, AL356747.18, AC007151.2, AL121924.13, AC084865.2, AC044797.5, AC005553.1, AC007421.12, AC010326.6, AC011450.4, AC012627.4, AJ009612.5, AL031575.1, AL133174.15, AP000356.1, AC005822.1, AC008440.8, AL359914.14, AC013562.6, AL109797.18, Z93928.1, AP001681.1, AC005031.1, AL590628.6, Z82206.1, AL137792.11, AL121890.34, AC018636.4, AC005182.2, AC024589.4, Z73900.1, AC002477.1, AC008952.6, AL031286.1, AC008897.7, AJ011930.1, AP001350.4, AL163300.2, AF317635.1, AL352978.6, AC004634.1, AC090942.1, AC005365.1, AP001621.1, AE006463.1, AL031311.1, AL451075.15, AC051619.7, AC004051.1, AC006064.9, AL031670.6, AC005585.1, AC003999.1, AC007318.4, AC007272.3, AC073866.16, AC011731.8, AC069543.4, AC006345.4, Z95703.2, AL022721.1, AC068993.14, AJ295844.1, AC067722.21, AC006038.2, AL049778.3, AL355517.12, AC008857.5, AL354829.8, AC072052.6, U18270.1, AF205588.1, AC011477.5, AF023268.1, AC002351.1, AC008764.7, AF207550.1, AL445263.6, AL161901.18, AC020934.7, AC004922.2, AL079342.17, AL031847.17, AC003098.1, AL121881.35, AC005726.1, AL136313.27, AP001712.1, AL080317.11, AL035705.22, AC010725.5, AC009412.6, AC004814.2, AL049759.10, AC020904.6, AC090514.1, AL096865.28, AC079907.25, AP000684.4, AC016026.13, AL138759.20, AL033529.25, AC011475.6, AL034395.6, U80017.1, AF287262.1, AC008123.9, AC084356.22, AC022407.6, T50763, R53008, AA054732.
HANGG89	39	845690	1 - 2643	15 - 2657	BF215862, BE675932, BF216697, AL692182, BF433516, AW748849, AA477305, AL269928, AL264345, AL476206, W88860, H18309, AA479629, AL138307, N30904, AL343016, R42588, AL500167, AL928577, AA011427, AW139105, H47436, AL350196, AA962561, H65317, AA353763, AW193644, AW614106, W88754, AL240815, H64403, AW243810, H64466, AA349069, AW469218, AL038838, AL038983, AL142134, AL037727, H64452, H47347, AW469225, AL038822, R12712, AA011390, AL422579, AL043814, AL043923, AL043845, AL040617, AL044186, AL041238, AL047012, AL041577, AL041459, AL044064, AL040294, AL041635, AL044037, AL047170, AL040463, AL046994, AL040768, AL046850, AL045753, AL041752, AL045684, AL040625, AL047219, AL040052, AL040621, AL043570, AL043848, AL041374, AL043627, AL041523, AL041730, AL044074, AL041602, AL043492, AL040839, AL043677, AL040472, AL043467, AL040510, AL042135, AL043538, AL047064, AL040464, AL045671, AL046442, AL041133,

					AL039316, AL041324, AL041159, AL046914, AL046392, AL040322, AL041098, AL044258, AL044272, AL040119, AL040444, AL041096, AL040148, AL045920, AL049018, AL045817, AL047057, AL044187, AL040458, AL041955, AL045990, AL044199, AL041292, AL041358, AL040576, AL041163, AL040332, AL041142, AL041346, AL040529, AL044274, AL041168, AL040745, AL046330, AL041197, AL040571, AL040128, AL047036, AL040342, AL042096, AL040553, AL041186, R39766, AL040285, AL039360, AL044165, AL040091, AL040414, AL041131, AL040090, AL044201, AL037436, AL039744, AL041051, AL040168, AL046327, AL043775, AL040370, AL040155, AL040149, AL079878, AL040253, AL040082, AL037443, AL037435, AL039338, AL041227, AL045857, AL039432, AL040329, H91585, AL040075, H64415, AL037343, AL037335, AL044162, AL040263, AL043496, AL037323, AL040255, AL041140, AL041296, AL045725, AL041086, AL040193, AL039915, AL043612, AL045989, AL041246, AW954219, AL037295, AL041278, AL038761, AL041233, AW292212, BE777965, AL049069, H90657, AL040619, AL041277, AL040238, AL079852, AL043537, AL039643, AL046147, AL043941, AL080031, AL041210, AL037341, AI681139, AL041347, AL134524, AL044125, AL047037, BF091487, AL037279, R39765, AL046097, AV761360, AL043444, AW968190, BF672937, AV742695, AV762836, AV699269, AW969625, AV709580, AV763230, AV763985, AV759285, AV742580, AW970107, AV708024, AV760852, AV764428, AV726590, AL045328, AV764028, AV759241, AW970070, AV652528, AL045994, AV733915, AV724617, AV727618, AV704144, AV653353, AV725582, AV724650, AV760354, AV704626, AV724068, AV730416, AV708786, AV725255, AV708872, AV723054, AC021237.5, AJ244004.1, AJ244003.1, D78345.1, AJ244007.1, AJ276256.1, U94592.1, AJ276254.1, AJ244005.1, AJ276255.1, D13316.1, D50010.1, AB025273.1, AJ276253.1, D17247.1, AJ276257.1, AF144029.1, Y14219.1, AJ276251.1, AL122101.1, AL136764.1, AF144028.1, AL133053.1, AL136762.1, AL136763.1, AL136758.1, AL133074.1, AL136755.1, AL133049.1, AL133082.1.
HAPBS03	40	656755	1 - 1489	15 - 1503	AI742631, AU119590, AU118010, BG259904, AI800165, AI800177, AI817228, BG180146, BE813479, BE535299, AV725950, AW009788, BE549267, BE894325, AV757104, AA173790, BF038610, AU150757, AI983626, AU144839, AI580092, AA479607, AU145896, N31934, AU144384, W72461, AU152288, AI826420, AI817464, AU150963, AU151993, BE780217, AU145816, AU160659, BF817682, AA486402, AU150397, AW272227, BE813518, BE280368, AI400650, AI829127, AI859821, BE902423, BE349331, BF326757, AU145027, BE813644, AU156304, AU149695, BE902011, BE731981, AI200823, BG060141, AU135928, AA812768, AW162031, AI804420, AU148793, BE350105, AI810286, AI174621, AU160342, BE731153, AU156374, AV706272, AA262076, AV701945, AW768265, AI436131, AW204987, AW104123, BE218179, AU153197, BF970278, BF570446, AI092268, AA191221, W76519, AW630344, BF973324, BE548188, AW628275, AU157431, AI830727, BE045222, AW474225, BE536210, BE927040, AW204297, AI095806, BF229981, AW075962, AA279162, AI419217, BE504508, AW571815, BG059854, AW054950, AU143588, AA132187, AA346081, AW272217, AA937599, AA768309, BG119737,

AI269189, AA213390, AW470843, BG152444, AA345939, AU119495, AW472911, N79590, BF965572, BE927026, AW135722, AI476168, AI225142, AW468954, AW662675, R98330, BF701626, AA219273, AA894959, AW131851, AI953548, AW020315, AI273292, N42771, AA483620, AW020778, AU123385, BE789652, AA806664, R76355, BF798339, AU143059, C01324, AA477442, AA278394, AA360766, AA493588, D57433, AA055730, AI263848, BF568115, AA355957, C16574, BE768067, BE257278, BE769335, AI871532, BG056236, AU157375, C15332, BE768128, C15888, AI572258, BE832706, AA127285, AA213389, BF568943, AA306589, BE768330, AI419087, AW352394, AI301771, AW948844, C16185, AW352393, AI086134, BE768255, AA379170, AW150588, T05903, AI868436, AW607253, T34681, D56966, T05872, AI383207, T83511, AW386700, AA360855, AI553717, BE002352, AA749012, BE255441, BE407649, AA318574, BF916812, AI417990, AA948636, AU126576, D58170, D81687, R33934, BE537246, T83365, N56217, BE768115, Z28428, AA384012, BF910964, BG036399, BE006509, BE328348, C16357, AW136837, D54272, AW581573, AA054844, AA343818, BE176576, AI240376, BE973789, AA114282, AW891081, AW965974, AL045469, AA278975, AA344020, N55736, D57510, AA779191, R33042, AA531526, AW891054, BG034932, AA641391, AF000364.1, AL109936.10, BC001449.1, AL161799.19, Z82022.1, AL137459.1, AF219137.1, AB056809.1, AL359618.1, AL117432.1, AB062978.1, AB056421.1, AL512746.1, AB047904.1, AL050149.1, AL133640.1, AL117435.1, AF061943.1, AB055374.1, AB060916.1, AB060826.1, AL512750.1, AB048919.1, AL137557.1, AK025967.1, AL137648.1, AK027213.1, AL133075.1, AF090900.1, AL162083.1, AL050116.1, BC004958.1, AL512689.1, AL133560.1, BC008485.1, BC003687.1, BC006832.1, AK025084.1, BC003548.1, AF090901.1, AL512765.1, U39656.1, AL110196.1, BC006180.1, AK025632.1, AK026927.1, AF125949.1, AB060912.1, AF090934.1, AF090943.1, AL049430.1, AB056420.1, AK025312.1, AL512718.1, AL049314.1, AL353957.1, AL137550.1, AK026542.1, AK024524.1, BC005858.1, AK026741.1, AK027146.1, AF056191.1, BC008365.1, AL050277.1, AK026504.1, AK026045.1, AF225424.1, AL137271.1, AK027164.1, BC006195.1, AL162002.1, AK026086.1, AL512684.1, AL080159.1, BC008899.1, AK026959.1, AL096744.1, BC003122.1, BC006494.1, AK000718.1, BC001967.1, AF091084.1, BC008387.1, BC004951.1, AL133016.1, AK025254.1, AL137527.1, S78214.1, AK000486.1, AL389939.1, AL050024.1, AK026480.1, AL122050.1, AF132676.1, AF061836.1, AL137538.1, AK025015.1, AK000323.1, BC004556.1, AL133565.1, AL122121.1, AB049892.1, Y16645.1, AFI77336.1, AB060852.1, AF090903.1, AB052200.1, AF271350.1, AK000083.1, AK025092.1, AL359601.1, AF260566.1, AL389982.1, BC006807.1, AK026532.1, AL137463.1, AK026865.1, AK026408.1, AF026816.2, X72889.1, AL137526.1, AL049347.1, AK027096.1, AK026522.1, AL359583.1, AF110640.1, Y14314.1, BC008417.1, AF217982.1, AL122093.1, AL389935.1, BC007021.1, AK024538.1, AK026534.1, AK024588.1, AFI06862.1, AB052191.1, AK026583.1, AJ242859.1, BC008717.1, AK025772.1, S77771.1, AL442082.1, X65873.1, AK026593.1, AB055361.1, AL080060.1, AB051158.1, X82434.1, AF097996.1, AK026597.1, AK025414.1, AF183393.1, AL133557.1, AF252872.1, AL133113.1, BC002733.1,					
---	--	--	--	--	--

						AK026462.1, AL080124.1, BC008488.1, BC008070.1, AL133080.1, AB055370.1, AK025339.1, AB055315.1, AL512733.1, AL162006.1, AL049452.1, AK025491.1, BC001045.1, Z37987.1, AB055368.1, AK000310.1, AF125948.1, AF111112.1, AK027116.1, BC004181.1, AF078844.1, AL122110.1, AL359941.1, AL512719.1, AB048953.1, AB050510.1, AL137560.1, BC005168.1, AK026744.1, AL136844.1, AK025209.1, AK027204.1, AL117460.1, AB062938.1, AB063084.1, AK025573.1, AL136768.1, AL353940.1, AL136586.1, U80742.1, AK026551.1, AL050138.1, AL050393.1, AL136805.1, AJ012755.1, AF104032.1, AK027868.1, AL136893.1, AK026600.1, BC007326.1, AB063070.1, BC006164.1, AB063008.1, AL122111.1, AK026947.1, AK027200.1, BC003684.1, AF146568.1, AB047609.1, AL133606.1, AK027193.1, AL136749.1, AK026608.1, AK026592.1, AK000614.1, AL136928.1, AL049283.1, AL049466.1, BC003682.1, AB060917.1, AL136789.1, BC007680.1, AL117457.1, AK026434.1, AL050108.1, AL136845.1, BC006201.1, BC002343.1, AL096751.1, AB062750.1, AK026452.1, X98834.1, AK027113.1, L19437.2, AL359622.1, AL136622.1, AB060876.1, AB060893.1, AB056427. 1.
HAPNY86	41	587261	1 - 1266	15 - 1280		AL1354977.10.
HAPNY94	42	699770	1 - 728	15 - 742		BG029349, AW384082, AL653230, AW384103, AW590965, AI952047, AW474522, BF514114, AI952951, AI138532, AI199860, AW474480, AI655852, AI656352, AV727834, AI424794, AA909918, AI377297, AA632416, AA205078, BG150070, BE243783, AA709293, AW016441, AA906134, AI350684, AI825691, AW770135, AA971473, U51144, BE867482, AA770535, AA873641, BE160147, BF772564, BE184408, BC002538.1, AL133351. 33.
HAPPW30	43	135227 8	1 - 1458	15 - 1472		BF568560, BF309463, BF568858, BF968457, BE729680, BG121453, BE044480, AW958703, AW957664, AW341517, AA868588, AA479992, AA758865, AA305964, AI276502, AV696016, AA846842, BF963424, AW510684, AI183515, N41325, BF674083, AW273135, AA954695, AI685296, H57026, AA969117, AI147710, N95033, AA962530, AV650263, AA758255, BF929642, BF798962, AI337591, AA150989, AI675402, AA775255, AI167695, AI798973, AW172620, AI359078, AI688288, AI151098, BE931071, AI911606, AW469667, AA383301, H83172, AW749394, AW603134, AI188832, AI078598, H58146, AA446238, AA310796, AA724109, AA864698, AI240610, BF033606, BF854704, AA953573, AA421572, H41807, W15373, H48433, H46522, AI739312, AW956749, BF951265, AA977855, AA757910, H87382, AI216014, AA877407, AA098821, BE168746, BE208218, W38885, H46521, R11443, R19191, H82944, C04986, AI479980, H56935, W72627, AI216655, AA975974, R99133, AA922234, AA339733, AA375160, BF352033, AW183259, AA421590, AI459843, BE930311, BE930299, T61945, AI216656, AI902298, H70309, AI902295, AI191499, T71506, AW844824, AA383302, N57057, BF800855, AA150942, AA568552, T62175, R94393.
HAPQT22	44	587601	1 - 621	15 - 635		AI002744, BF680944, AW732188, AA167511, BF868994, AI979005, AI157938.22, AP001711.1, AC013356.8, AC022217.5, AC005225.2, AC090942.1, AC011811.42, AC005052.2, AC020915.6, AC066589.3, AC027319.5, AC005098.2, AF109907.1, AC008569.6, AL135927.14, AC007227.3, AC020931.5, L44140.1, AC020558.4, AP001725.1, AC011487.5, AL034405.16, AC011465.4, AC004382.1, AC009244.24, AC004801.1, AC004526.1, AC009086.5, AL050341.18, AL139316.5,

						AL445222.9, AL049760.26, AC007240.2, AP001748.1, AC087071.2, AP000501.1, AC007899.3, AC012309.7, AL390374.16, AC005399.19, AC008812.7, AF243527.1, AC003665.1, AC004166.12, AC011445.6, AP000503.1, AC006241.1, AL031575.1, AC004686.1, AC020916.7, Z97054.1, AL450226.1, AC002544.1, AC011497.6, AL357952.7, AL031767.13, AP000088.1, AC004953.1, AC004965.2, AC009412.6, AC004867.5, AF134726.1, AC005840.2, AC020913.6, AC018690.5, AC011477.5, AC009477.4, AC006441.13, AC018644.6, AC011500.7, AC016742.10, AL122035.6, AC007546.5, AL590763.1, AP001889.4, AC010328.4, AC003982.1, AC005071.2, AL161731.20, U91326.1, AL355353.23, AC003101.1, AC018711.4, AL035587.5, AC006211.1, AL354696.11, AC009144.5, AC083884.6, AP000552.1, AC011455.6, AC007404.4, AP001710.1, AL136362.10, AC078846.2, AF088219.1, AC005668.1, L78810.1, AC008962.8, AL049766.14, AC002477.1, AL391122.9, AL163279.2, AC005670.1, AL136295.3, AL109743.4, AC010469.7, AC008771.4, AC010422.7, AL008630.1, AC009470.4, AL022320.23, AL513008.14, AC007421.12, AL117338.15, AC020550.4, AL139113.21, AC026368.37, AL158040.13, AP000251.1, AC009996.7, AL445263. 6.
HAPUC89	45	834358	1 - 1139	15 - 1153		AL525296, AL522464, AL521417, AL533389, AL521416, AL524355, AL526414, AL526331, AL530863, AL524354, BE311955, BF725110, AL264358, AL669655, BF036463, BE312775, BF984883, AA477724, BF314033, AL530380, BE937625, AL526176, AL523655, AL530864, AW139040, AL520874, AL526455, AL126122, AL823620, AA312871, AL530093, AL857695, BF315809, BE256735, AW440406, AW271360, AL523656, AL200833, AL024780, AW136150, AW134590, AL522465, AA496351, BE924996, BF476679, AA292746, T55664, AL367466, AA496400, AL274000, AL283242, AL801876, AW068036, AA583620, AA477725, AA829681, BE797269, AW136110, BF822582, AL554612, AL922256, AA758054, AL533433, AW591703, BE735184, BF344330, AA296469, AL017151, AA293719, AA427485, BE562900, AW300774, AW889471, AL863281, AL424169, AL291789, BF445650, AL525339, AL670976, H01676, N55872, AW952132, BE242458, H01677, AA364430, BE735989, AA318820, AA508789, BF311298, BE397771, AA301453, BE785480, BE893629, AL248018, BF032466, BF342490, AL540614, BE264109, BE926389, BF309156, AA232553, BG255921, BE392626, BE261742, AL085402, BE206819, BE276164, BF312350, BF206486, BF763257, BG252820, AA642901, AW188803, AL758262, AA908888, BF207123, AW137361, BE258582, BE384894, AL093805, BG257985, AL751518, BF810986, BF337632, BF796886, BE397750, BE504399, F19099, AA610640, BF794720, BG104721, AL581186, BC002494.1, AC004150. 8.
HASAV70	46	130078 2	1 - 715	15 - 729		AW003948, BE044439, AL968397, BE467670, BE326659, AW026300, AL422743, BF026131, AA921765, H74227, AA765813, BE246373, AW630293, BE671926, BE698423, BE933123, AL121985.13, AL276429.2, AF291815.1, AL271869. 1.
HASCG84	47	603947	1 - 1065	15 - 1079		U69188, AW967218, AA524082, AW964322, AA477567, AW135981, BF436586, H14669, AW965610, BE870961, T62872, BF356026, AL309281, AL653643, AA629824, BF507821, AL268700, BF799497, AW607114, BF437588, AA307058, AA662791, AW204504, AA985578, AL831853, T09193, H05165, R44815, T62722, Z39918, AA477443, AA514678, BF962688, BE784445, BF184514, R41285, AW953430, T08773, T33866, BE539074, D61598, AW571983, BE702716, BE702704,

HATAC53	48	135227 6	1 - 1945	15 - 1959	AA345841, AL039974, BG058150, BG250744, AV728806, AA830749, AA761343, AB033058.1, AL139109.14, M85165.1, AL049426.1, BC004934.1, AL096720.1, BC000235.1, BC002816.1, BC000761.1, AK026950.1, AB056798.1, BC003637.1, AL136635.1, BC003122.1, AF098484.1. BE009171, AI870866, BG231683, BF677384, W72843, BE856898, AA332556, BF447208, AA772868, AI083630, AA056018, BF920128, AI130854, AA469081, AA661635, AA457490, AA130359, AI199995, AA931966, W67527, W76412, AA630878, W67545, AA458753, AI183475, AA296889, W81565, AW513265, BG023825, BF109158, AA826675, W81612, AA989066, AA076945, AA077497, AA077528, AA077040, BF515950, AW955816, AA296961, AI243042, T12258, AA056067, BE546107, AA027306, AA077342, AA026401, BE937756, AI818951, AI818971, AA022530, AA022531, BE077324, BF569541.
HATBR65	49	635514	1 - 798	15 - 812	AW754098, AV747079, AW964560, BF827304, AI697254, AA826321, AA663880, BF924786, AA772037, AV725414, AA826164, AA663006, AA826322, BE062047, AA835931, AA319870, R95053, AV760830, BF918713, BF959165, AI053538, BF930635, BE828744, AA078591, AF139781, AA491430, AA078183, AW393403, W74390, AW578861, AW393400, AA320812, BF840307, AA078213, AW752269, BF757569, AA077448, BG004304, AW793003, AA047825, AA001509, AA076683, AW857010, BE183669, BE183617, BE699552, AV720211, AW973541, BE932909, AI254770, AI284543, AI251203, AI249853, AV743864, AI251284, AW276678, AW966385, BF952670, BE707812, AI251034, AI250552, AW970571, AW869794, BE139139, AA609826, AW303098, AA552586, BF952311, AV719632, AV718487, AW905386, BE138387, AV720104, BF952747, AA015737, AW975623, BF129140, AA076784, AA604865, BG222875, AV720729, AA504818, AW905269, AV754716, AW969831, AA501867, BE042006, BF589824, W72324, BF691892, AI954192, AA610381, AA503018, AA747757, H04977, AA904211, AI912401, AI279417, BE968744, AC004084.1, AF030453.1, AC005088.2, AC004951.5, AC018720.5, AC007078.3, AC004980.4, AC007000.2, AC006480.3, AC004878.2, AC006014.2, AC007003.4, AC005488.2, AC005098.2, AC004867.5, AC004166.12, AK021477.1, AC005071.2, AC005236.4, AP000350.1, Z95115.1, AC0073462.8, AC007792.1, X51956.1, Z95331.2, AC022382.3, AC087071.2, AC005291.1, AL035495.13, AL162424.20, AC002107.1, AC002106.1, Z98884.11, AF168787.1, AL157791.4, Z82215.1, AF172081.1, AC008116.8, AL008729.1, AC018809.4, AC079141.7, AC011811.42, AC006111.3, AC020558.4, AC007766.1, AL162426.20, AL139317.5, AL390838.26, AL031005.1, AL161779.32, AC004477.1, AC008392.6, AL162615.13, AC009509.7, AC003690.1, U95740.1, AL034372.33, AF196970.1, AF253417.1, AC000062.1, AL109825.23, AC024028.10, AL034553.12, AC003030.1, AL591398.2, AC005899.1, AL034400.2, AC073492.18, AC011473.4, AC005772.1, AL139316.5, AC006487.8, AC011472.7, AP001929.4, AP000963.2, AC072061.8, Z98051.6, AC005327.1, AC007225.2, AL109804.41, AC006057.5, AP001711.1, AL136984.20, AC009506.5, AL139100.9, AC008397.7, AC007199.1, AL137162.25, AF190464.1, AC009247.12, AC025430.5, AC005261.1, AC006357.5, AC005325.1, AL121880.21, AC008395.6, AP000314.1, AL353715.21, AC025166.7, AL049779.6, AL355336.15, AC011479.6, AC011495.6, AL359644.10, AC020904.6,

	50	603948	1 - 1742	15 - 1756	<p>AC004706.1, Z98044.13, AL049874.3, AC007201.1, AL161757.4, AC007130.2, AL139415.10, AC022384.4, AC008738.6, Z95114.19, AC090841.1, AC005378.2, AC022001.3, AL031848.11, AC018494.6, AL445435.11, AC002128.1, AC018811.4, AC007685.2, AL121601.13, AC004805.1, AL353777.18, AL359397.3, AC078818.19, AC007679.4, AP001781.4, AP000563.1, AP000194.1, AC007956.5, AC020633.3, AL021155.1, AC009131.6, AL359236.4, AL391839.9, AL391259.15, AL096701.14, AC008079.23, AC039056.7, AC005256.2, AL353812.13, AC004263.1, AL023353.5, AC008551.5, AC005932.1, AC079602.15, AP000133.1, AP000211.1, AJ011930.1, AL356354.10, AL163300.2, AC007066.4, AC006441.13, AC005586.2, AD000684.1, AC000134.14, AL021878.1, AC002369.1, AL032821.2, AC009510.9, AL096791.12, AC009161.12, Z82208.1, AC008641.6, AC005056.2, AL049869.6, AC023105.7, AL355312.24, AP001718.1, AL136179.15, AL078461.38, AF279660.2, AC004873.3, AC010205.5, AL353692.14, AC013726.7, AP000497.1, AC010530.7, AL133320.8, AD000864.1, Z82214.23, AL356805.5, AP000471.2, AB045360.1, AF001552.1, AL359382.23, AL450465.12, AL354815.10, AC005933.1, AL121754.18, AC018695.6, AC010618.7, AF186190.3, AE006467.1, AC002126.1, AL035681.13, AL354866.10, AC009238.4, AC007240.2, AC020946.4, AC013467.8, AC011449.6, AC004522.1, AC020945.6, AC010605.4, AL035086.12, AL049843.18, AC005231.2, AL136228.8, AL033526.24, AP002456.3, AC008080.1, AF181668.1, AC005800.1, AC011455.6, AC013355. 7.</p>
HATCB92	50	603948	1 - 1742	15 - 1756	<p>AI253043, AA621792, N84222, AA094505, AL522648, AC009244.24, AK025372.1, BC008349.1, AB020635. 1.</p>
HATCP77	51	748244	1 - 2084	15 - 2098	<p>AI791525, AI733035, BF434939, BF433029, AI457816, BF478158, AI299145, AA910198, AA952936, AI301175, BF446488, AA904191, BF477842, AF209747.1, AF099137. 1.</p>
HATEE46	52	565618	1 - 1661	15 - 1675	<p>BE739761, BE867642, BG252738, BF670373, AI590088, AA452296, AW188012, AI467834, BF110214, AI698059, BE535889, BE220673, AI076779, BG170578, AW304047, AI653610, AW070709, AA015580, BE300577, AA705209, AI458930, AW173124, BG149183, AI037932, BF671524, AI597851, BE671575, AI310753, AI051897, AI128681, BF447913, AW295982, BF433016, AI300950, AI140885, AW473730, BF448227, N35880, AW770729, BF108371, R72042, AW302140, AA479329, AW023183, AA040787, AI494017, H98707, AI453020, AI932397, AA041222, AI038152, AA478593, AI459059, AA151356, AI168123, AI160559, AI125997, AI702632, AI073784, H97885, AV746537, AI433746, AI348429, AI025926, AW178814, AA035147, AI917957, N26242, AI189919, AI298395, AA225891, AI383747, AW085003, BF431762, AW079138, AI214632, H57061, N27692, W20186, AI537044, AI796916, AA661665, AI290329, AI383748, T39342, H99889, AA045544, BF433765, AI948963, AI143362, BE044374, AA767678, N36000, AI203768, H88073, AA311260, N91032, AW794932, N27062, AI382971, R19439, AI037915, AA829174, N24274, N50690, AI702532, AI192385, AW166934, AI979183, AA664910, AA056938, R20449, N92329, AI625107, N43958, AW193300, AA095102, AW888582, AI160547, AA515467, N36021, N28575, N50773, BE536609, AA054589, BF694768, N73785, BE814490, AW606976, BF942077, N99407, AA151355, BF942458, AW663523, BE046513, AA897347, AI829594, BF130347, BE814323, BF089510, BE738984,</p>

HBAFJ33	53	625916	1 - 1266	15 - 1280	AL133574.1, AL117450.1, AK027342. 1. AL134941, AI936102, AA806752, AI922844, BE396072, AI568741, AW593236, AW152304, AI417415, AW629175, AI017620, AW055249, AW166099, BE858335, AA115732, AI127303, AA576745, AI829922, AI478929, AI355013, AW593259, AI814920, BE301136, BE858329, AI424011, AA975643, AI032624, AI457317, BE858317, AA733170, AI334944, AI151526, AA478034, BF195105, AI291127, AI690771, AI220431, AL043583, AA593974, BE795539, AI096520, BG251676, AI094885, AI831777, AI143003, AA204724, AW080063, AA687374, AI179553, AI373929, AA961480, AA677252, AI539748, AI150654, AI811537, AI565632, AI138450, AA931056, AA974477, AA889899, AW070496, AA886867, AI360841, N51090, AA427863, AI499657, H99368, AI347782, BE613141, AI362268, AI369607, AA179986, BE619719, AA039351, BE350785, AI200968, AA134403, AW263162, BF939644, AI376627, AA642471, AA133209, AA035355, AA224345, AA854796, AI123495, H93126, AW821145, AA872914, AI707705, AW935023, AA804238, AI312418, D80144, AA723522, BE766774, BE834005, AI445884, BE766739, AI520801, BE177107, AA032258, N98499, T33101, BE742708, C14225, D51441, BF664500, H59455, BE082634, R96670, AW009711, BF093621, AW935098, H52680, AI265911, AI129147, BE177074, T74907, AA782664, AA568793, BE743686, D31233, BF670650, AW022342, BF336698, BE082719, R97433, AA152475, AA427988, AA365942, BF975267, AA099862, AI372406, AA922699, T33142, T32913, F34614, AI676138, N34899, BF879062, AA852622, D80145, AW794944, AI352444, AA363998, T30009, AI372746, BF873002, H08716, W31065, BF872967, W28879, AW881570, BE547161, AA312863, AI039527, AW082087, BE771401, R70284, BE262112, BF340241, AA319768, AI420273, AA868050, AW513743, AI583354, BF349629, C14224, AW881571, Z38385, AA443158, AA354867, AW881573, AU149417, AI914657, AI277700, BG231859, AA910603, AI961888, BE717468, N54216, AV727127, AI911845, R91976, H56262, BF975357, AA661955, F04560, AW364002, R41447, BG255586, T75007, AI857675, AI076059, AA627769, BE717493, AW754481, BF690414, AW799938, AI797975, AA478191, AA548786, W22044, BE939215, BE081547, BF378280, BF365011, T24992, AW381095, AW839942, AW363800, AI124578, BG166902, BF770472, C01685, BC000778.1, AK025162.1, BC008847.1, AF214731.1, AL136886.1, Z48570. 1.
HBAFV19	54	843036	1 - 939	15 - 953	AL516557, AW273167, AW301700, BF795352, AA704856, AI808501, AI633808, AI050770, AI500656, AW902226, AW964585, AA480361, AW445068, BF354764, AA886018, AA886008, BE535750, BF307524, AI480277, BF960307, AA321228, AI565943, AI493176, BF960304, BF336986, AW027985, BF308034, BE159877, AI653941, BE829951, AW664513, AL135012, AW858522, AW577199, BF084778, AW601637, AL134110, AL045494, AI134524, AL042523, AL045327, AW577201, AL042420, AL042468, AW577192, AL045328, AL047163, U46344, AL042741, AL042655, AL042898, AL136927.1, AK025498.1, BC009255.1, AP001781.4, AC000381.1, AL136764.1, AL136762.1, AL133053.1, AL136763.1, AL136755. 1.
HBAMB34	55	553553	1 - 1013	15 - 1027	BE673228, AA771964, N93148, AA844453, AA782604, AA936090, AA594712, Z23123, AW015698, AI589136, F00234, AA479120, AI301192, BE348256, AI769699, AI870557, AA676477, AW074427,

						AI216517, AI378183, AA505080, N34510, BE644673, AA854947, AI355342, AI915783, N51070, N39571, AI568614, N57476, BG107565, BE670027, N47320, BF437948, AW071941, N66687, AL353708.10, AL031591.19, AC022407.6, AL354809.12, AC007350.1, AC005921.3, AL445928.8, AC005068.2, AC002542.1, Z75747.1, AC006252. 4.
HBCPB32	56	135240 3	1 - 1354	15 - 1368		AL522529, AA776274, BE439690, BE439637, AI421729, AI421796, AI031855, AI418669, AL522530, BF312464, AL530028.
HBCQL32	57	113495 4	1 - 388	15 - 402		AW574632, AA779803, AI420937, AI139252, AA939344, BF591447, AI631896, BE906760, AA614327, AI086516, AI017902, AI651172, BF437264, AI972275, AI023361, AI692172, AI753360, AA813167, AI381013, AW015745, AA458613, AW404165, AI351368, AA057753, AA405488, AA569272, AA383066, AW602265, BF342355, F37908, AA368651, BF840063, BF081585, AW959191, BF835219, BE717190, N51554, AW301825, AW272082, C01302, AW264472, AI659074, BC008044.1, AK024535. 1.
HBGNU56	58	135241 2	1 - 850	15 - 864		AW954217, BE875979, BG025158, BFS29722, BE395207, BE734057, BE789549, BE873075, BE785505, BE614806, BE738333, BE614883, BE253565, BF340317, BF737302, AA044211, BF792671, AW796084, AW238972, BF738993, BG012029, BF812968, BE876237, AW406916, BF901660, AI342703, AA075901, H25630, BE810793, BE183450, H43485, AA296837, R95168, BF809994, BF868942, AL532494, W95348, H80718, BF804848, AA287470, AA806231, AL532493, AA298795, BF997411, AA296696, AA296826, BF082160, AA218811, AA296869, BF331433, BF829581, AA034079, AV743953, AW802996, H73675, R55519, BE140100, BF056207, AI819836, BE737872, BF446055, AA465105, BE396147, AA044081, AA583464, AI582284, AA983595, BE775061, C00212, BF771777, BF799156, BF895320, BF931829, AI537196, BF771828, AA523623, R39644, AI521467, AI952620, BE828356, AA187096, H42497, AA297863, BF763569, AW338141, BF736987, BF248485, AI346295, AI424071, AW512207, BF905334, AI066489, AI028038, AA699982, N86960, AI358167, T10507, AI683820, BF245896, BE904822, BF978464, BF811185, AA622655, BF814100, AA304509, AA595646, AA912088, AA287334, AA643965, BF747982, W95391, BE043918, BF807379, AI279829, AA722634, AI817892, AI187305, H80719, AA485829, R55520, BE671577, BF750444, AI637718, BF674579, AA873526, AW103333, AI650465, AA531049, AA658172, BG057590, AA583458, AV743642, AV739884, AV742260, AV743114, AV738121, AV736224, AV744272, AV741543, AV738375, AV738262, AV743004, AV739415, AV736083, AV737550, AV737002, AV741197, AV737715, AV742899, AV741000, AL037348, AV737101, AV739156, AV739895, AV701296, AV743288, AV740805, AV740787, AV737726, AV737727, AV744332, AV739871, AV740443, AV742357, AV743197, AC002390.1, AF177940.1, AL080096. 1.
HBHAD12	59	420036	1 - 772	15 - 786		AW905621, BE087451.
HBHMA23	60	848016	1 - 1161	15 - 1175		BF672220, AW384404, AI924632, AW167650, BF743981, AW449208, AW363590, BE693858, BF827339, BF826403, AI909935, AW167610, BE073612, BE061388, BF089104, BF088537, BE829540, AW577643, BF356926, BF827064, BF355973, BE926857, BE720600, BE934196, BF804024, BF831089, BE933114, BF742671, BF355970, AI024451, AW381927, D45555, BE934074,

						BE932793, BF827455, BG150765, BF356272, BF356040, BE9333205, BF830960, BE720102, BE933204, BF831058, AA428580, BF095122, BF827065, BF743071, BF874568, AA316552, BF827647, BF088448, BF356778, BF088529, BF752887, BF752876, BF830967, BF750902, BF827636, BF088528, AW384405, BF154912, BE073529, BC008429.1, AL121901.20, AL355392. 7. AW293249.
HBIMB51	61	963208	1 - 523	15 - 537		AI827239, AW104045, AL536345, AL096774. 9.
HBINS58	62	135238	1 - 829	15 - 843		
		6				
HBJFU48	63	460392	1 - 835	15 - 849		BF674706, AA657543, AV757289, BE139139, AI250552, AI251284, AI251203, AI284543, AI251034, AW674277, AI254770, AW303098, AA582073, AI249853, AC005696.1, AF045555.1, AC090514.1, AF243527.1, AP001725.1, U91318.1, AL121897.32, AP003357.2, AC008155.9, AC005081.3, AL132838.4, AC011470.5, AP000692.1, AL132640.4, AL109976.23, AL121992.24, AL135928.6, AL033529.25, AL353807.18, AC020916.7, AL138849.12, AC011247.10, AL158830.17, AP000501.1, AL008637.1, AC006270.1, AC011464.5, U95742.1, AC022384.4, AC011555.5, AL049795.20, AL033383.26, AC005921.3, AC012170.6, AC004922.2, AC007934.7, AC018828.3, AL121653.2, Z82215.1, AC022383.3, AL049636.22, AC007216.2, AC005971.5, AC005058.1, AC010431.7, AL135783.6, AC044797.5, AP000355.1, AL121928.13, AE006462.1, AL590682.9, AL451083.5, AL162724.16, AC004906.3, AC006312.8, AL359272.9, AP001666.1, AP001716.1, AF111169. 2. AL162724.16, AC004906.3, AC006312.8, AL359272.9, AP001666.1, AP001716.1, AF111169. 2.
HBJIY92	64	778065	1 - 2420	15 - 2434		BF507343, AI830176, BE777697, AL134817, BE466375, BE536137, BG033415, BE770976, BF665352, AI141799, AI333231, AW083069, BF674917, AI819484, AW291130, AI693686, AI139569, AI765217, C05997, AI191712, AI360840, AW403076, AA830242, N23996, AI707975, AI360845, AV746530, AI743353, BE675302, N28536, AA737061, AW405631, AI864662, AI627462, W31857, AI492266, AW589350, AI581705, AI624651, N34736, AI860242, AA181897, AI811985, AV682516, AA812089, AA768170, BF589611, AI942262, BF572713, H99855, AI536025, AA612923, N67098, AA705383, AA082077, AA761491, AA884032, AA442783, AW977117, H00904, AW770178, AI796455, BF571118, H00903, AI568136, AA682798, BF343253, AI926340, AW591358, T91642, BE887851, BE693611, N28620, D63124, AI432722, T91587, AI740627, AL513907, AL513597, AL514791, AI433157, AL514063, AL513977, AL515413, AL513553, AL513693, BG179993, AL514627, AW087445, AI613017, AI580190, AI469532, AI702433, AL513631, AI539153, AL514691, AL045500, AL513999, BE018334, AI934035, BG260037, AL514919, AI538716, AL515191, AI564719, AI572787, BF724198, BG252914, AL514303, AV758822, AV758592, AI636719, AI687362, AI812080, AL515019, BG180996, AL036146, AL036361, AI583316, BG110797, AW169653, BF868489, AL513713, AI499393, AV756393, BE048131, BE966479, BG257535, AI524671, AW274192, AI815855, BG031815, AI446606, AI273142, BE620084, AA470491, AL514015, AW162071, AV758806, BG164371, AL514473, AL513643, BG109221, BF885675, AI687728, AI560099, AI536685, AL513911, AW301409, BG168696, BE964683, AI818683, AL514867, BE964006, BG109125, AV733397, BE967261, BF337043, AV756619, BG250190, AI281779, AV705644, AI653541, AI269696, AL514087, AI537244, BE966388, BF882343, AA640779, BF970162, AV682249,

AL513951, BE964812, BE789764, AL119791, AV756026, BF792099, AI475455, AI702406, BF342070, BE965481, AW827203, AL514025, AL036802, AW827249, AV709517, AW238730, BF970731, AL121270, AA508692, AV756150, AI349933, AV755613, BE781369, AI570384, AI436456, AW188539, AV757018, AL135661, AI868831, AW075413, BG151247, BF724691, AI499131, AI554245, AI857296, AW002342, AI224992, AI573032, AW999049, BF817926, BE018711, BF792469, BG253026, AL514935, AI633419, AI498579, AI866002, AI349004, AI475451, AI433976, AI280747, AL036274, BE964495, BF795712, AL513803, BG036846, BE963035, AI610645, AI567351, AW268220, AI439087, AI439762, AV729890, AI521012, AI872711, AI934036, AV711924, AV706164, BF792767, AI492540, AI469811, BF971016, AI539771, AV757737, BF970658, BE965190, AI866608, BE964700, BE964633, AB014540.1, AL110154.1, AF134894.1, AK027131.1, AK025084.1, AB056420.1, AF090903.1, BC001967.1, AL049452.1, AB019565.1, AF090934.1, AL117460.1, AF090900.1, AL133640.1, AL050149.1, BC008387.1, AB063070.1, AL133016.1, AL162083.1, AL359596.1, AF090896.1, AF146568.1, AL512733.1, AL136787.1, AK027868.1, BC008488.1, S78214.1, AB055303.1, AK026045.1, AL442072.1, AF090901.1, AL136892.1, BC008417.1, BC007021.1, AB055366.1, AL133557.1, AF104032.1, AF219137.1, AL442082.1, U42766.1, AK026855.1, BC008365.1, AL117457.1, AL359618.1, AL049938.1, AB049758.1, BC003687.1, AF090943.1, AL049314.1, AL136789.1, AJ242859.1, AF106862.1, AL137459.1, AF125949.1, AL136586.1, AB056768.1, BC003683.1, AL389978.1, AL110196.1, AL136749.1, AL080060.1, AB048953.1, AF218014.1, AK000212.1, AF111847.1, AF078844.1, AL122093.1, AL133080.1, AB063008.1, AB047615.1, AL050116.1, AL050108.1, AL050393.1, AB055361.1, AF091084.1, AL162006.1, AL110221.1, AL096744.1, AL050146.1, AL157431.1, AB052191.1, AL133606.1, BC006807.1, AB063046.1, AL136799.1, AL137527.1, AL122050.1, AK026741.1, AB047801.1, AK027096.1, AF097996.1, AK025339.1, AK026647.1, AL390167.1, AB060887.1, AK026452.1, AK026865.1, AK026608.1, AK025958.1, AL359601.1, AK000323.1, AB048964.1, AL133075.1, AL080124.1, AL050277.1, AL512718.1, AL080137.1, Y16645.1, AK024538.1, AL049466.1, AL137283.1, AL512719.1, AB060916.1, BC001045.1, AK000618.1, BC004556.1, AL122121.1, AK026533.1, AL133093.1, AL512746.1, AK000083.1, AL050024.1, AK026744.1, AL389982.1, AL117583.1, AL136768.1, AK025772.1, AK026784.1, X82434.1, BC002733.1, AB060863.1, AK025414.1, AB060908.1, AL133565.1, BC006195.1, AB055368.1, AK026086.1, AL137557.1, AB060912.1, AK000445.1, AK000432.1, AL049430.1, AF177336.1, AL136844.1, AK025092.1, AL133560.1, AL359941.1, AK027116.1, AK026642.1, AK026542.1, AB060825.1, AK026504.1, AL512689.1, AL122123.1, AK027113.1, AB060826.1, BC008485.1, AB052200.1, AK025484.1, AL117394.1, AF207829.1, AB048954.1, AB062938.1, AL117585.1, AF125948.1, AB051158.1, AK000137.1, AL512754.1, BC008382.1, AK026534.1, AL137550.1, AF225424.1, BC004951.1, AK025491.1, AK026927.1, AB055315.1, AL136928.1, AK026532.1, AK026592.1, AL110225.1, BC008899.1, AB060852.1, AL353940.1, BC006412.1, AK026959.1, BC002839.1, AL049382.1, U91329.1, AK026583.1, AL122098.1, AK000652.1, AB055374.1, AB056809.1, AL512765.1,				
---	--	--	--	--

						AL050138.1, AL137648.1, AL137538.1, AL122110.1, AK026600.1, AL049283.1, AL512684.1, AK000718.1, AB047904.1, AL049464.1, AK027200.1, AB049892.1, X65873.1, AK024524.1, BC008070.1, AK025967.1, AK026353.1, AF260566.1, BC007199.1, AL359615.1, AL136845.1, AL136786.1, AB060929.1, AK024588.1, AL117435.1, AL137271.1, AB056421.1, AL049300.1, AL162008.1, AL359583.1, AF056191.1, BC008983.1, AK027204.1, AK027164.1, AK026630.1, BC008893.1, AK000647.1, Z82022.1, AL110197.1, AF183393.1, AL136843.1, AL162062.1, AL137463.1, AL512761.1, AK025906.1, AK026947.1, AL080127.1, AK025524.1, U80742.1, X72889.1, AL512750.1, AK025632.1, AL133072.1, AK026629.1, AK025391.1, AK026480. 1.
HBJLC01	65	638410	1 - 858	15 - 872		AW962384, AW956292, AA631830, AV708590, AW964544, AV709418, A1814702, AV729132, AV726091, AA652816, AV657453, AW956077, AW962908, AW966634, AW963349, AV708167, AV703597, AV727065, AV703388, AV703232, AW961593, AV702425, AW961606, AW950632, AW963756, AW963609, AV701873, AW959734, AW962444, AV707331, A1525316, AV703761, AV729517, AV726754, AV707276, AW961313, AW963348, AV705525, AW962942, AW963583, AW966270, AV708720, H60864, AW950748, AC004033.3, AC007050.25, AC008745.6, AC005500.2, AP000502.1, Z94801.1, AF019413.1, AC005261.1, AC005332.1, AC025588.1, AC006372.2, AC008265.15, AL590763.1, AL359235.3, AP000789.4, AC005476.4, AC079602.15, AC009789.21, AC018638.5, AC024952.4, AL022318. 2.
HBJLF01	66	732111	1 - 1918	15 - 1932		BG261130, BG121213, BF347966, BF796462, BE899286, R17115, A1123525, A1697325, BE783654, AW402585, AA032055, BF724098, AA031919, AW402594, AW402872, AW026287, W89010, A1926967, W95778, BF887406, A1376419, BF381332, BF507805, BF888120, AA233002, A1669291, A1963299, BF744292, BF907549, BF907541, AA954836, BF888127, A1768850, AA768759, BF888128, AA232951, BF744299, AW090314, A1571824, BF888074, N73038, AA480645, N53675, AA886377, BF888119, AA535561, A1864506, BF799491, A1217778, N51612, BF381336, N53906, BE819619, A1806785, BF744934, W95735, BG251027, BF381311, A1674508, AA016130, AA743705, AA917873, AA649797, BF887394, AA631017, BF907590, A1480218, AW302053, BE139664, Z39059, H86222, AA954334, AA456896, A1244571, AA015836, A1341715, AA485019, A1078627, A1015866, AA827439, BF745018, AW271993, AA954612, AW001670, AK000208.1, AC011005.7, AC083866. 2.
HBJLH40	67	828130	1 - 1839	15 - 1853		AA830583, AA465482, AA731000, AA815064, A1632903, AW576518, AA847860, W84413, AA210914, AW341113, AA721650, AA488009, R45299, AW873717, A1693003, AW977787, A1283768, A1127928, A1148391, BE048487, AA417947, AA236463, A1671420, AA836581, Z38691, AA811097, AW471001, AA210913, A1500017, AA709242, AA418189, A1492414, AA234646, AW956166, AV703593, AW950675, AW963117, AV706278, AV701983, AW954129, AW965551, AC013414.7, AK026400. 1.
HBJNC59	68	112580 2	1 - 1047	15 - 1061		AW007501, AA902287, A1858092, A1005351, AW959933, BF342564, AW083940, BF820646, A1870864, AW960414, A1032697, AW149115, AA829811, AA709070, AW264612, AA643392, A1951841, AA614344, A1312642, AA533443, BF850030, A1799536, AA991955, BG222284, A1830766, AA594172, A1289881, A1741805, A1276207, AW088660, AW268666, A1749660, A1369678, A1264768,

AA625243, AI16740, AI190367, AI510691, AW168615, AI817506, AI792359, AV695532, AI291890, AW089929, AI268176, AA617718, AI609047, AI913963, F34379, AA985480, AI282722, AI394498, AA864826, AW050814, AW800132, AI494152, AI868440, AW800119, AA991995, AA937062, AW129114, AA877343, AW594090, AI335628, AA335122, AA737786, AI708280, AA642608, AA318733, AI245599, AW054951, AA603928, BF877450, AI074177, AA936631, AA569858, AW080143, AI768186, AA995511, AA317892, AI718073, AI915027, AI963480, BF820659, BF913950, AA318753, AA345519, AW796949, AW800259, AV714865, BF755228, AI291076, AA335136, AI340221, W87494, AW083985, AI739187, AI830861, AI351218, AI266613, AA779248, T53694, AA335121, AI950591, AA746624, R23643, BE826140, AA804997, AA740560, AI749854, AW148663, BE773353, AA961830, BF810637, BF810673, BF813070, BF812010, BF813049, R35066, BF945171, BF813054, BF813079, AW168417, BF810677, AI299182, BF813063, AA878942, BF810666, BF810872, AA983420, BF813082, AA367958, BF810669, BF810657, BF811989, BF810652, BF813065, T53693, BF813069, BF813073, BF813052, BF812005, BF813066, BF810672, BF813053, BE826066, BF094201, BF813085, AA804991, BF812479, BF811996, BF812002, BG151300, AI198965, BF813100, AI913330, BE826068, BF849490, BF812030, BF812029, AA862333, AA632062, BE965724, AW084151, BE900751, BF815930, AI570169, AI281867, AI345416, AI345612, AI345415, BE891834, AV756343, BF911517, BF339322, AI950664, AI335426, AI348777, BG166654, AV746955, AI554821, AA464646, BF904192, AI690813, AW083572, AI249946, BF840692, BE967104, AL045421, AI890907, AW193467, AI277325, BF025791, BF812936, AW263569, H89138, AL514763, AA641818, AV709679, AI491916, AW005612, AV682150, AI633125, AV746964, BG104819, AW827289, AI538850, AL046942, AI185535, BF812963, BE906419, AW827227, AI955906, BE895585, AW162194, AL048644, BE295833, AI114703, AI817244, BG029829, AL134712, BF885082, AW020419, AL039086, AI636619, AW168503, AA761557, AV744136, AI866469, BG032036, BF792099, AL515375, AL514829, AI568060, AI540606, AA830839, AI678446, AI823719, T99953, AI567582, BF792961, BF872670, AL038564, BE892296, AW105601, BF911528, AF135157.1, AF260332.1, BC008983.1, AL137461.1, AB052176.1, AL049452.1, AF217966.1, BC008078.1, X53587.1, AK024538.1, BC007375.1, AK000647.1, AL122106.1, BC007198.1, AL136850.1, AL136844.1, AF111847.1, AL389935.1, AF348209.1, AL353625.5, AK027081.1, BC008280.1, AK026556.1, BC001655.1, BC006133.1, AL137548.1, AF205073.1, AL157431.1, AL050170.1, AF230496.1, BC000550.1, AF132730.1, AF061573.2, AL080074.1, AF218031.1, BC001785.1, AF242525.1, AK024570.1, AK026408.1, BC004899.1, AK025208.1, AF183393.1, AB050431.1, BC002466.1, AF058921.1, AL583915.1, AL133010.1, AF026816.2, BC004222.1, AK025339.1, BC004362.1, AL136768.1, AF162270.1, BC004905.1, AL137476.1, BC003569.1, AL122110.1, AL133014.1, S78453.1, AB048888.1, AL162003.1, BC002519.1, AL389957.1, AF106697.1, BC004908.1, AL137539.1, BC005151.1, AF218005.1, BC002631.1, S76508.1, AB055290.1, AK026593.1, AL136799.1, BC003687.1, AB063088.1, AK026526.1, BC009294.1, AL137537.1, BC006164.1, AL137530.1, BC003610.1, Z82022.1, BC008485.1, BC007767.1,					
--	--	--	--	--	--

					AL136754.1, S77771.1, BC002491.1, AF239683.1, AK024524.1, BC003052.1, AF003737.1, AK026522.1, AB060837.1, AF094480.1, BC008417.1, BC008751.1, AL133049.1, BC002733.1, AK026532.1, BC008365.1, AK026542.1, AF169154.1, BC003410.1, AL136928.1, BC001236.1, AF073483.1, BC001328.1, BC006480.1, AK026947.1, BC007641.1, AL122098.1, AL133016.1, AL135394.1, AB063077.1, AB047904.1, AK024622.1, BC003695.1, AY034001.1, BC005678.1, AL133637.1, AL1359624.1, AF353396.1, BC008070.1, AB062942.1, AB050410.1, AL133640.1, AL080154.1, AB063074.1, BC006410.1, AB060916.1, AK025632.1, AL137558.1, BC007534.1, AL122118.1, AL389982.1, AJ012755.1, AF022813.1, BC009033.1, X76228.1, AL512754.1, AK026626.1, L30117.1, AB050533.1, AB048954.1, AL137538.1, AK027164.1, AB049880.1, AB060839.1, AL359601.1, AL136864.1, AL136787.1, AF285167.1, AL137665.1, BC004943.1, BC001418.2, Y14040.1, AL359583.1, AB047930.1, AK025798.1, AB060903.1, AK026038.1, AK025484.1, BC004944.1, AL080148.1, AL137641.1, BC001470.1, AB049848.1, AF078844.1, BC002457.1, AF358829.1, AF245044.1, AL136845.1, AB063070.1, BC002798.1, AK027113.1, AB060873.1, AF143723.1, AF218006.1, AF114818.1, AB060929.1, AK027204.1, BC001963.1, BC005160.1, AB063079.1, BC009253.1, AL137256.1, AK026924.1, AJ010277.1, AF321617.1, AK027114.1, AK027136.1, AL050138.1, AC002467.1, AF271350.1, AL357195.1, AL080110.1, AJ242859.1, BC004395.1, BC008717.1, AL117460.1, AK027160.1, AK026855.1, AB055303.1, AB060887.1, AF090900.1, S69510.1, AK000206.1, BC000556.1, AF308800.1, U91329.1, BC004950.1, AK000247.1, BC009284.1, AB060897.1, BC004370.1, BC006103.1, AF151109.1, BC004951.1, AL050172.1, AF305835.1, AK025573.1, AL137574.1, BC005843.1, AK026649.1, U57352.1, AL117629.1, BC002454.1, AL137488.1, BC000348.1, BC008930.1, AL359941.1, BC000051.1, AL133067.1, AL137556.1, BC004945.1, AB051158.1, BC007280.1, AL133558.1, AL389983.1, AL080159.1, BC005931.1, BC004530.1, AL137560.1, BC002355.1, AB060832.1, AK000636.1, AB049900.1, AK026885.1, AB060863.1.
HBMCI50	69	668268	1 - 906	15 - 920	AP002088.2, AC007429.11, AC020612.40, AL513015. 6.
HBNAW17	70	526797	1 - 587	15 - 601	AA713518, AA807610, AW104604, AA830415, AW975518, AL138824. 19.
HBOEG11	71	130075 2	1 - 1342	15 - 1356	BF056642, BF516162, AI807970, AI081658, AA861514, AI494148, AW448950, AI973060, AI400318, BF849398, AA385680, AW028539, BF847907, AA377456, F34025, AI472684, C01967, BF344191, BG251209, BF337896, AW079432, AI783808, AA649296, AI343030, AI334889, AW023871, BF107008, AI336565, BF911517, AW243767, BF874010, AW410046, AW151283, AL041230, BF911521, AV744830, AA836558, AL048644, AA769697, AI799189, BE892572, AW952403, AI933926, AW074057, AW020619, AA768214, BF154738, AF083500.1, AF100780.1, AF074604.1, AL139352.16, AF100781.1, BC002631.1, AK024855.1, AK024533.1, AB060883.1, AP001605.1, AP001699.1, BC001795.1, BC008895.1, AL136789.1, AL137461.1, BC008488.1, BC003105.1, BC005805.1, AB060828.1, BC005084.1, AC008897.7, AF125948.1, AL162085.1, Z49258.1, AL445220.5, AL049276.1, AK024570.1, X76228.1, BC002948.1, BC007371.1, AL096728.1, AL117590.1, AL080124.1, BC000199.1, AL109672.1, AF090900.1, BC005890.1, BC000895.1,

					BC002535.1, AL136893.1, AL512751.1, BC007417.1, BC002816.1, BC001328.1, BC002372.1, AB048995.1, BC008751.1.
HBOEG69	72	793786	1 - 1397	15 - 1411	AW576190, AA524064, BF701378, AI337569, AW058654, AW964434, BE568412, AW978965, AW241842, BE221243, AI346249, AW241843, AA825846, AA936562, AI184881, AI346396, AA570030, AW368546, AA465472, AW995507, AW361365, AV743550, W74158, AV750714, H80936, BF879997, BF880246, AI144077, AV743963, AV740879, AI053597, AI222773, R95913, BF901243, AA318779, BF088361, D62291, R27740, R27740, BF767423, AI277044, AV743740, AI053934, AI310256, R27741, R08998, C00592, N64904, AA827757, AK024978.1, AC006146.2, AF147723.1.
HBXFL29	73	842802	1 - 2215	15 - 2229	AU124786, AL523480, AU125638, AA608680, BF185800, AL135214, AI346426, AW369825, AV715627, BE044175, AA704114, AU148578, AI953494, AA102088, AA099340, AA875957, AA411819, AW103703, AI339566, AI610736, W27706, AA825903, AI934820, AU149251, AI080375, AU160262, R67711, N40031, AW901194, AA315231, N27293, AA401638, AI307801, AW589999, Z42700, AA382141, Z38860, AI382965, AA774224, BF816363, R62663, R43562, AI244553, AW118387, R62613, R22885, T35989, R66107, AI204282, F10296, BF946792, BF944261, AA095193, AA093900, AI964066, AW576941, AW025279, BE048061, BG114528, AV759054, AV761957, BG105500, AI625444, AI679506, AB020705.1, AK022701.1, AK025648.1, AC005207.1, BC002697.1, AK026649.1, X99717.1, BC008365.1, AF260566.1, AL359932.1, AL137267.1, AB049849.1, AB047623.1, AJ401156.1, BC007347.1, AK027142.1, AY007109.1, AF285836.1, BC006287.1, AL049276.1, BC007034.1, BC009311.1, AF151109.1, U72621.3, AI390154.1, AF103804.1, BC003684.1, AI137479.1, AB062750.1, AK025391.1, AF093119.1, AK026642.1, AK000391.1.
HCACU58	74	625923	1 - 1540	15 - 1554	AW470141, AI540555, AI150724, AU120416, AA547979, AI187148, AA287570, N32944, AA255583, AI802087, AW276458, BG009661, AI923052, AW976784, AA904211, BF805088, AI278972, AW269504, BF942976, BF939548, BF725844, BF944736, AV720367, BF920612, AA812058, AA410788, AA535216, AW069227, BG056362, AW965008, BE265787, AA425924, AA873573, AV719902, AW819125, AI634187, BF804385, AI445582, AA487475, BF965394, AI160786, AA742815, AI133514, AI608699, BF767878, AW023111, AI625604, BE139139, AI491765, AI457313, AI733856, AI250552, AI792521, AW969743, AA228778, AI279417, AA483606, H73550, AA570740, AU147162, AW505253, F28204, BF857849, AI284543, AI889579, AI251034, AI527073, AI251284, AI251203, AA470512, AA315361, AW972919, AI679002, AV760019, AA568204, AI538236, BE645220, AA847508, AV695478, AI291439, AI884383, AL047467, BF968874, AI537995, AI130709, AA730305, N59569, AW968564, AI890324, AW674631, BF725761, AI223626, AW341978, BE138509, BG250286, AI679759, AI814682, AA847427, AV725627, AI889696, AI254770, AA456924, AA714110, AW805539, AI053688, AW575000, AW131417, AA832145, AI573198, BG230549, BE138594, AL041375, AC009511.16, AC005071.2, AC020913.6, AC005081.3, AC004166.12, AC079602.15, AC087071.2, AC005015.2, AC002472.6, AL138724.12, AC005098.2, AC005011.2, AC019206.4, AC009412.6, AC007664.12, AC018642.6, AC011461.4, AF053356.1, AC006064.9, AC004841.2, AC020908.6, AC011497.6, AC005562.1, AC005102.1, AC009079.4,

					AC027319.5, AC005080.2, AL136123.19, AL023693.25, AC006211.1, AC006312.8, U95740.1, AL031447.4, AC016776.6, AP001718.1, AC008569.6, AC004965.2, AC004089.25, AL049830.3, AC007201.1, AC020934.7, AC005104.1, AC007956.5, AC025166.7, AC011449.6, AC073657.5, AC008753.8, AC004971.3, AC004531.1, AF001549.1, AL031276.1, AL137792.11, AC008155.9, AL445686.14, AC011489.6, AC004859.2, AC005484.2, AL096840.25, AP001753.1, AC004967.3, AP000350.1, U52111.2, AC000085.5, AC008760.6, AL157823.9, AC002126.1, AL050335.32, AL109984.14, AC072052.6, AL590762.1, AC005488.2, AC008946.6, AL161747.5, AC018758.2, AL135927.14, AC010319.7, AC011811.42, AP001710.1, AC007055.3, AC005529.7, AC022383.3, AC002300.1, AF134726.1, AL133367.4, AC006014.2, AL359382.23, AP001711.1, AL109623.9, AC007227.3, AJ400877.1, AP000501.1, AC018809.4, AC011491.5, AC009509.7, AC019205.4, AC009488.5, AC007686.5, AC009244.24, AP003439.2, AC004812.1, AP000045.1, AC008395.6, AL031283.26, AC011444.5, AC002288.1, AP001694.1, AL121891.22, AC005625.1, AC012476.8, AC020658.6, Z93015.9, AL109825.23, AL109797.18, AL160269.14, AL121586.31, AL049795.20, AE006463.1, AC003108.1, AL132639.4, AC007225.2, AL049872.3, AC020904.6, AC009267.15, AC018828.3, AC008403.6, AC008474.7, AC005972.1, AC002425.1, AP000116.1, AB043547.1, AC069262.24, AL354720.14, AC021188.6, AC083884.6, AC006088.1, AL121972.17, AC025593.5, AC011472.7, AC003029.2, AC011487.5, AC004966.2, AC005920.1, AL390738.4, Z82178.2, AC005288.1, AC004491.1, AC000025.2, AC004846.2, AC004167.1, AL109758.2, AL451125.7, AL139390.15, AL136137.15, AC008481.7, AL354928.9, AL136418.4, AL139054.1, AC006480.3, AC018663.3, AC008738.6, AC007003.4, AL050318.13, AC004638.1, AC011514.3, AC004883.2, AC005231.2, AC005736.1, AC005702.1, AC009996.7, AC010326.6, AC008521.5, AL049569.13, AC008440.8, AC004834.2, AL022396.1, AC018711.4, AC005520.2, AL078461.38, AC074121.16, AL121905.23, AL022318.2, AC010494.4, AC027125.4, AC005971.5, AC005000.2, AC008551.5, AC011464.5, AB003151.1, AC008556.5, AL139316.5, AB026898.1, AC018738.4, U91323.1, AL049761.11, AC007386.3, Z84466.1, AC010422.7, AP002852.3, AP001725.1, AC018719.4, AC008635.6, AL109935.39, AF047825.1, AC007850.29, AF109907.1, AC004000.1, AC011484.4, AC020906.6, AC018751.30, AB038653.1, AL133545.10, AL008719.1, AL139396.17, AC005412.6, AC005778.1, AL121825.19, Z95152.1, AC024163.2, AC010092.4, AC006441.13, AC004826.3, AC044797.5, AL132780.5, AC005522.2, Z95115.1, AC020663.1, AL138756.23, AC011465.4, AC002312.1, AC022384.4, AL035086.12, AC083855.2, AC012512.7, AC008755.6, AL163032.3, AC000360.35, AL354864.16, AC016830.5, AC007731.14, AC004876.2, AL109628.5, AL034549.19, AL137073.13, AC004873.3, AC005086.2, AC006329.5, AL035659.22, AC011480.3, AC002565.1, AC015982.9.
HCACV51	75	130670 6	1 - 2069	15 - 2083	AL521141, AL521142, AL524128, AV695196, AV694072, BF338443, BG114245, AV689975, BF670146, AI760812, AV723814, BF574966, AI633691, AI907541, BF528015, AI743976, AW006271, BE549523, AI700393, AA115333, BF448307, AI768614, AI378849, AA131998, AA131832, N66024, AA151271, AI129857, AV704651, AI091145, AW380450, AI269749, AA172168, AV724434, R54280,

					AA172321, AV724565, AI867173, AI300863, AV760041, R54285, AA151270, AI286118, N95138, AA582838, AV647292, BF887566, HI13107, Z44149, W37854, BE002303, R97002, BF665270, BF931446, H06694, AV694980, R95925, H67104, AV692112, BE165279, H71324, R23855, H67641, AA223592, W37842, R51892, AI620275, BF185415, AA115245, AI638273, T16792, T34309, AI570769, R58781, Z45647, H06695, T32678, AI241920, AI382722, BE348480, D79743, BE139490, HI13108, BE927649, F06574, BF351298, BF976915, BE827609, BF931447, Z40141, F05407, AI200985, F02843, R24487, BE165298, C05965, AL008639.15, AL512348.8, AL009182. 17.
HCDAF84	76	544988	1 - 413	15 - 427	BF001489, BF970768, AI887163, AI491710, AI886355, AW088698, AW022636, AW162194, BF814357, AI648699, AV647773, BE904652, AI225000, AI634805, AI521799, AA857847, AI954293, BE879459, AI567582, W45039, AL513901, AW195253, AI698391, AW151132, BE393784, AI923989, W38553, AL514025, BF527014, AI590423, AI370623, AI699823, BE540578, AV721135, AI554343, AI586931, AI590043, AV711455, AV727980, AA279795, BG113385, N25033, AI285439, AI499570, AI334893, BF969477, AI114703, AW149092, AL514015, AL039086, AL118781, AV726156, AI679487, AI690748, AL513977, AI274508, AL514047, BE839731, AL037649, AI247082, AI824576, AI559752, AI587209, AL046466, AI611803, AW163834, AW008166, AI684279, AI380723, BG179993, BG166668, AI690813, AI289791, AV726605, AA724368, AI473536, AV726229, AA767924, AL046454, AI382313, AW055252, AI537677, AW051088, AV682289, AW020381, AW080076, AI499325, AI590755, AW006032, AL120756, AI623385, AI312210, AW071349, AI394522, BG122101, AI434731, AI440238, AI627714, AI859644, AI538885, AI927233, AI471429, BF343205, BG024570, AI080256, AI560679, AA847199, AW170725, AI638644, AI653829, AI619820, AA580663, AV728997, AI889189, AI567971, AI758924, AI538764, AI624641, AV682195, AV681848, AL040694, AI419826, AW020419, BE875959, AW194014, AL514791, AW129916, AI383804, AI049733, BF527697, BG113168, AI225023, AI540674, BG033732, AI744204, AL042745, AI623941, BF997967, AW183620, AV709679, AW020397, AI469516, AW020480, BE018334, AV736995, AI955945, AI633061, AI624245, AW129456, BE974031, AV757495, BG260881, AW130804, BF892007, BG109606, AV733760, AA928539, AW089844, BF725599, AV682787, AV714975, AW081902, AV713627, AV758477, BF814516, AI784214, AW089351, AV755415, BF792740, BG180273, BF811808, BF245586, AI537187, AI446646, AI440260, AI537516, AI584118, AW880037, BE910373, AA641818, AI336754, AI224373, AI348995, AA808175, AI539260, T69241, AW105591, AW169618, AI374878, AI383510, AI539690, AA001397, BF343238, AI702527, BF339322, AI801592, AI345415, AI345688, AW161812, AW150762, AW105412, AW021717, AI540759, AI688854, BF811802, AW129659, AI889306, AI633125, AI310575, AI538564, AI888208, AA830994, AI310582, AI915291, AI538850, AW152182, AI472487, BG177717, AW673679, AI915210, AW029611, AI340533, BF811804, AI815855, AI741467, N71180, AW983832, AI539800, AI572076, AW104141, BF669151, BG110490, AA761557, AI432644, AI334445, AI570807, AW945539, AW196720, BE877467, AI866469, BE047606, AI251221, AW132056, AV750565, AL138406, AV761267, BF752997, AW834282, Z94161.5, BC002697.1, AL080118.1, BC007732.1, AF069506.1, AB052191.1,

HCE2F54	78	634016	1 - 1262	15 - 1276	<p>AV763540, AW472872, AV763195, AW731867, AW960468, AI307201, BE047069, AL038606, AI635818, BF827410, AV755677, AI754253, AW020992, BG222267, AA488746, AI654247, AI345654, AW162288, AI457397, AI886629, AI355224, AV728928, AA846935, AA469327, AW501687, AV759580, AW265393, AV761403, AV761188, AV761608, AW304805, AW023672, AA491960, BG177307, AW189068, AI821714, AI792133, AI791913, AV658631, BE046438, BF885741, BF677892, AV735495, AI160117, AV760207, AI587583, AI587565, AI696962, AI138455, AV758994, AA829225, AL038842, AA642053, AI345518, BF851403, AV742057, AW167372, AA584581, BE301175, AI357823, AA551552, BE393367, AI821785, AI434695, AI696793, AL043578, AA847499, AV761498, AI087133, AI289447, BF740673, AW088846, BG059314, AA579179, AL120343, AL047427, AV761317, AL037683, AI733856, AK021483.1, X55926.1, X54181.1, X54175.1, X55922.1, X54178.1, M13254.1, AC008521.5, X54177.1, U18399.1, AL135749.3, X74558.1, AC073138.3, AC005180.2, M87919.1, AC007395.3, AC005303.1, AF015147.1, AC016894.7, AC005823.1, AK022114.1, U95740.1, AC020904.6, AC010616.5, AC073898.1, AC024168.4, U95742.1, AL031650.22, AC007676.19, AL121906.18, AF015166.1, AC006006.2, AC090514.1, AC010605.4, AC013717.8, AL449305.4, AC002312.1, AL356378.17, AC006012.2, AC016587.7, AC006038.2, AC010150.3, Z94722.1, AC068919.4, U49740.1, AC002369.1, AP000556.2, AL117692.5, AC020934.7, AC005785.1, AC002350.1, AC006130.1, AL157791.4, AC023471.4, AL157938.22, AL137792.11, AP001725.1, AC004841.2, AC004816.1, AC007216.2, AL034555.2, AC011495.6, AC007957.36, AL034380.26, AF015148.1, AB025285.1, AC006141.2, U91326.1, AC020558.4, AC015651.18, AP000811.4, AC002563.1, AL390298.13, AC011491.5, AC084865.2, AC008958.6, AL138787.11, AL353193.7, AC018926.10, AL136313.27, AC004873.3, AL512885.4, AC006538.1, AL049759.10, AC004021.1, AC008848.7, AC006441.13, AF238375.2, AC004231.1, Z99128.1, AC011464.5, AC020931.5, AC000353.27, AC005324.1, AC005484.2, AL353588.25, AL450224.1, AC004876.2, AC006036.3, AC007390.3, AP000557.2, AJ009611.6, AP000744.4, AL590762.1, AC020659.5, AC010506.6, AP000552.1, AP000275.1, AC026172.3, AL022329.9, AF053356.1, AC068713.8, AP001858.4, AJ236701.1, Z82190.1, U80017.1, AL450226.1, AC010730.11, AL132639.4, AC008622.5, AC006132.1, AC004596.1, AL160165.17, AL390239.16, AC023490.5, AL049776.3, AL445201.14, AC008755.6, AL121905.23, AL121992.24, AL138724.12, AL109628.5, AC007842.1, AC001531.1, AL109976.23, AP000037.1, AP000105.1, AC018719.4, AL078584.17, AP001677.1, AC006484.2, AC044797.5, AC020983.7, U95743.1, AL133318.11, AL109984.14, AB000882.1, AC067722.21, AF241727.1, AL121751.12, AP000289.1, AL133367.4, AL121655.1, Z94802.1, AC004797.1, AL022316.2, AC006238.1, AP001867.3, AL355392.7, AC008754.8, AC005020.5, AP000042.1, AP000110.1, AL096791.12, AC004941.2, AC005412.6, AC006578.5, AL096701.14, AC007917.15, AL359513.12, AC009244.24, AC020750.3, AC006080.1, AC004659.1, AF141308.1, AL096765.12, AC005332.1, AL139109.14, AC004463.2, Z84467.1, AC006285.11, AP000692.1, AC010422.7, AL021391.2, AC009516.19, AC004990.1, AC005050.2.</p>
					<p>AL530657, AL534642, AL519887, AL519439, BE257752, AA769913, AI609266, BE674973,</p>

HCEFB80	79	114340 7	1 - 2480	15 - 2494	<p>AI652143, BG057242, BE046399, AI669608, AU157638, BF347064, BE046435, AI571552, AA406626, AI634414, AW731848, BE245626, AI372990, AW473891, AU153165, AA969877, AI458122, AA402109, AU157487, AI815017, AA936365, AA481847, AI052565, AA704608, AI860561, BE736308, AI591232, AA425187, BF685966, AA479747, AI922541, AA889587, AA992245, R47377, AV694506, AA707462, AA283778, BF589042, AI767815, AW439290, AI354234, AW630387, R82068, BF829195, BG152634, AA229272, BE246763, AI745410, AW074728, AI867440, AA405028, AI652744, AI799388, AW732540, AA724063, AI249812, R43967, BE247615, AA229721, AA290883, AA477093, BF847615, AW117313, AA425298, AW804421, AV661367, AW627358, AA456146, W45494, R82878, R82020, F35061, H01485, AW014040, F25139, AA339640, AI961334, AA478233, AA362857, AA326205, BE244646, AA229827, AA377429, AI186501, BG008599, BE242784, T32225, AV686564, AA688260, AI085847, AV686569, BE157547, AA860204, R08559, F09429, AA405272, BF845336, BF380796, BF380795, AI869044, AA883556, AA032260, AA332516, AA402982, AA332325, BE157532, AA336006, Z39018, AI695855, AI589935, AI583010, AI954634, BF841145, AW469249, F04759, AA032193, F04962, AI524382, BF922668, BE157535, H01586, AI298047, T89862, AL530658, BF883965, BF374266, M78413, BF883968, AW197535, AW952615, BF847600, AW007397, BE157466, AI907687, AI632570, AL519888, AK023173.1, BC007642.1, BC007864. 1.</p> <p>BF343021, BF339312, BF341481, BF967606, BF344530, BF344213, BF513319, AI393526, BE857064, AW016800, AI937454, AI370995, AW170034, AA416907, AW044650, N75664, BF341415, AW960857, BG222497, AA703765, BE855450, AU146334, AA703342, N64813, T23840, AA446784, AA228781, M86149, T08275, AA386225, AA417008, AI671567, T15689, AW128975, AA432098, H83023, M85314, AI277779, BG222958, BF923571, M79106, BG152559, R13095, R11764, R21361, BF921573, F05369, T28040, T10247, AA323697, AI361427, AW235399, AI352392, T10246, R37689, AW594074, R40527, H82804, N59328, BF894586, R46460, T15861, BE672078, C14288, D25217.2, AF319633.1, AL022327. 17.</p>
HCEGR33	80	425212	1 - 1616	15 - 1630	<p>AI204978, AI217542, T95193, T95093, AA179147, AA526099, BG056362, AL516659, AL049829.4, AC013449.8, AL355101.2, AC073542.4, AC007298.17, AC012592.10, AL138758.7, AC079316.15, AC005399.19, AC020629. 6.</p>
HCEMP62	81	684780	1 - 1846	15 - 1860	<p>AL520667, BF689505, AW953641, BG168504, BF343502, BE747867, BE737374, BE734304, BE514593, BE378257, BG179655, BF982990, BE909615, BG058649, BG115902, BG029850, AI688113, BE870978, AI554392, BF689070, BF690427, BE546131, AA911109, AW173438, AW382483, AA486370, AA778384, AI382028, AA776265, AW580475, BF874009, AA563686, AI493765, AI523553, AA484857, AI362311, AA811238, AA906681, BE047437, AA838288, AA460659, AI276177, AW404956, AW752131, BE763979, AA479791, BG029140, AA259052, AI097482, AW580486, AI082243, AA488079, AW510339, AA088205, AI609703, AI093069, AV683434, AW438882, AW366250, AA477188, BE141358, AI350871, AI953839, AI033274, AA283058, AA648139, AI087234, BE141360, AA226399, AA594766, BG006416, H03363, H53631,</p>

					<p> H04050, AI298774, BE141357, T86181, AI687929, AI270613, H48473, AA496296, BE185788, H53672, BE743169, H70534, AI433271, R99170, AW188898, AA359247, BF359882, AA374856, R23345, H28080, R70772, R33920, AI500391, AA852639, R81465, AA297085, BE543413, BE872231, T83919, BE141344, AA428830, R33033, AA297469, AW088943, AA621048, BE832975, AI400220, AA853069, R81663, AI963710, BF748942, R23264, BE259832, AA290677, BE163434, BE163435, AI687795, AW027045, AI289188, AA808274, AW074305, AA290975, AA461006, AA297403, R26089, AA226370, AA297468, R23497, BF000386, AA359017, BF813460, BE141374, AA258974, AW392388, BE702942, BE702948, AI683668, T86180, BE702945, AI653763, AA291083, H26077, BF768547, BF931160, T83747, AW058461, AW905754, BF841749, AW749912, AW016612, BF371479, BF807923, AW023590, BG033723, AL079963, AI241923, BG011287, BG058150, AI611738, AW983832, AW163834, AW983829, BG249582, AW051088, AL039086, AI282679, AW054964, BF792961, BG179243, AI868931, AI917252, AW118518, AL040241, BG113385, AI570807, AI582932, AI802542, AI174394, BF970768, AL037030, BF061286, AW198075, AI446373, AI912510, AI499890, BG166654, AI890907, AW026882, AI474146, AW983783, AW074869, AI280732, AI619502, AI677796, AI680162, AI352497, AI863382, AI886753, AI824576, AI923370, BF812960, BF920893, BF812938, BG113299, AW083778, AI624293, BF970652, AI280607, AI433157, AI702073, AL037649, AI310575, AL037582, BF812961, AL037602, AI457369, BG109270, AI762739, BG029053, AI932794, BE246734, AI340533, BE886827, AI520809, BG029829, AI633125, AI698391, AI270706, AI915291, AW152182, AW166903, BE967307, BE069307, AL036638, AL047675, AW131294, AI889189, BF970631, AI473536, AW827115, BE910373, AI270183, AW088899, BC002467.1, AK000261.1, AB048974.1, AL110280.1, AK024538.1, AL050092.1, AB056420.1, AB063046.1, AK025632.1, AF026816.2, AB060916.1, AB047801.1, AB056809.1, Y14314.1, AK025798.1, AK025084.1, AL389939.1, AL137271.1, Y16645.1, U80742.1, AL117435.1, AL512750.1, AF218031.1, AK026464.1, AL512684.1, AL389982.1, AK026480.1, AL136845.1, BC005858.1, BC004925.1, AF183393.1, AK026583.1, AL162003.1, AK027193.1, AL110221.1, AK026462.1, AK000418.1, AL080159.1, AI299431.1, AK025092.1, AL133075.1, AL050149.1, BC008387.1, AL136784.1, AK026528.1, AL359601.1, AL050277.1, AF225424.1, BC000316.1, AB055303.1, AB060887.1, BC003683.1, AB050534.1, AK026542.1, AL359618.1, AK026630.1, AF348209.1, AL353625.5, BC001967.1, U39656.1, BC003548.1, AL137533.1, AF090901.1, AL136787.1, AL137476.1, AK000652.1, AL359941.1, X82434.1, BC008417.1, S78214.1, AF090900.1, U78525.1, AL050138.1, AK000486.1, AL137480.1, AF271350.1, AF162270.1, AK000614.1, AL050024.1, AF177336.1, AL136844.1, AL137648.1, AB060908.1, BC004958.1, AB062938.1, AL050146.1, BC003122.1, AL137463.1, AL162002.1, AK000618.1, L19437.2, AL136615.1, AL137478.1, AK026045.1, BC006103.1, AK026744.1, Z82022.1, AB050533.1, BC003684.1, AK026647.1, AK026532.1, AK026534.1, BC008488.1, AF078844.1, AF090934.1, AK027096.1, AF217966.1, AL442083.1, AL137538.1, AL117460.1, AF262032.1, AF242525.1, AL136864.1, AL137488.1, AK025465.1, AL137292.1, X72889.1, AK026408.1, AF091084.1, AL162083.1, AK024588.1, </p>
--	--	--	--	--	--

HCENK38	82	658737	1 - 1495	15 - 1509	<p>AK000432.1, AB050410.1, AL137550.1, BC005168.1, AL359583.1, AK026885.1, AL080074.1, AK026600.1, AF260566.1, BC004556.1, AK026551.1, AL136805.1, AL136749.1, AL080060.1, AL512718.1, AB060861.1, AF353396.1, BC008070.1, AK026597.1, AL137560.1, AL049382.1, AK026164.1, AF143723.1, AL512733.1, BC002343.1, BC006494.1, AK026506.1, BC001963.1, AL162062.1, AK025254.1, AB055361.1, AL137294.1, AL133560.1, AK000718.1, AF111112.1, AL122123.1, S61953.1, BC005678.1, AK027113.1, AB060826.1, AL133640.1, AL359596.1, BC009212.1, AB063084.1, BC006807.1, AL136893.1, AF090903.1, AK026452.1, AK026927.1, AK000323.1, AK025484.1, AL110225.1, AL050393.1, AL122121.1, AJ012755.1, AF081197.1, AF081195.1, X53587.1, AK027868.1, AK026865.1, BC009284.1, BC009033.1, AK025967.1, AK000137.1, AB056421.1, AF210052.1, L30117.1, AF217987.1, AF285167.1, AK026762.1, AK027164.1, BC003682.1, AF061795.1, BC002733.1, AF151685.1, AL133016.1, AL353940.1, AL353956.1, X65873.1, AL133565.1, BC004264.1, AL389935.1, AF104032.1, AF230496.1, AK026855.1, AL133606.1, BC008893.1, AL157482.1, BC004244.1, BC005151.1, AL110196.1, AB048919.1, BC009310.1, AB051158.1, X69819.1, AB047904.1, AL133665.1, AB063088.1, AK000083.1, BC001045.1, AL136789.1, AL117457.1, AK025312.1, AK026608.1, AL512765.1, AK026593.1, BC008780.1, AB060912.1, BC008416.1, AK000450.1, AB048975.1, Z37987.1, AL023657.1, AK025708.1, AF125949.1, AL442082.1, AF061573.2, AB056768.1, AF097996.1, AK026741.1, AK027160.1, AK027144.1, AK026627.1, BC006525.1, AL050116.1, AB052200.1, AK027116.1, AL512719.1, AL133113.1.</p> <p>BG178033, BE960663, AV722833, BE907276, BE277857, BF952019, AA521308, AW182868, AA908959, AI628880, AW173363, AW665845, BE870003, AW631238, AI151418, BF996707, AI1818267, BG180581, AI653663, AA001203, BE150445, R78710, AA130178, W03542, AA746655, AI828924, AA001202, AI961323, BE277870, AI093113, AI377976, AI951984, AI635625, AI624029, AI418242, AW088095, AI346936, W92652, AA130170, AA024605, W60401, N53543, AI207798, AA969140, AV706224, AA206833, AA862855, AA83077, AW173095, AW467519, BF830518, AI890288, AW952261, AA676671, R76291, AA641764, W60310, AI536758, AA742467, W92685, BF830522, C01747, BF029590, AW273508, W72474, AL047508, AI863984, W46673, AA928559, H97873, W46482, AA969604, T17266, W92828, W94587, BF963436, AA024606, AA973624, R61420, BF107415, AI932612, W76228, N72501, BE147741, AA160170, AI247642, AI499771, AW582120, N92375, AI803849, C04881, AW192182, N67695, R76925, AV728500, BF906742, AA641806, AW601191, BG104607, H00789, T31087, R61378, BE706416, AL047509, R78711, R76567, AA564390, AA992073, C15162, AI187944, AW779277, H39236, AA812071, W61163, H85007, AA733042, W61229, AI016971, H81599, H97053, R78466, H86612, H85630, AV713546, H90060, H86032, R78534, AW952259, AW889353, AA021401, AI540906, W24617, R62435, AA714924, R84855, H00689, H81598, AA918680, BE903841, T08911, BF834059, AA501896, BG106391, R40305, H86526, H85633, AA021275, R21120, H85004, AA774992, AI834279, AW970014, BE140906, N56017, AA573996, AI300746, R13223, Z43839, AI834298, AA094627, R85725, AA600097,</p>
---------	----	--------	----------	-----------	---

HCEWE17	83	941941	1 - 953	15 - 967	<p>AI475228, AI834286, AW380821, H85894, AA573651, BE843503, T32504, AA010588, AW380818, BE881856, AI879932, AA992769, D55263, AA829059, AW770059.</p> <p>AI310325, AI022447, AA693896, R83833, BF819760, AI925934, AF193807.1, AY013268.1, AY013267.1.</p>
HCEWE20	84	543370	1 - 871	15 - 885	<p>T51653, AW168798, BG059728, AW151307, AA189081, AL133942, AI924175, AI610776, AI034217, AI479035, BE165748, AI811494, AW090210, AA346162, AW167452, AI687804, AI749571, AA470572, AW089655, AI197934, AI827133, AU144339, N64574, AA470493, AI697247, AI937684, N76274, AI984510, AL047920, AA223830, AA493998, BE176566, AV730063, T62931, BE148908, AA876415, AI801377, AW589501, AA085707, AW177317, AI439860, AI813517, AA581340, AI858607, AA099491, AA613244, AI887321, AA643785, AA633390, AU143906, AV719347, AI362951, W58428, AU146966, AA847621, AI564253, AI921101, AL041417, AA643823, AI567544, AI733077, AW177120, AI561208, AI264673, BE158397, AU145674, AA130536, AA694579, N74502, N54295, AW440317, AF063514, AU119100, AA873103, AW177237, AA160519, AA197059, AW177231, AW177264, AA598786, W49501, AA911409, N26540, BE264670, AL036881, AU146974, AA493751, AW994225, C17730, AA724159, AU145383, AA157033, AA041332, AA166854, H96719, AA055654, H65500, AA219480, AU148220, AI935333, AL523955, AI132962, AW084901, N48690, AI862874, D29455, AA598990, BE044603, AF074627, AV730577, BG235936, AA878800, R94112, AW275729, AI376984, AI951835, AA101456, AA503213, AW440351, AI735074, AW177266, BE904846, AA846188, AW177226, BE152426, AA493735, AA593081, AW615437, AI538654, AA404968, AW813744, AA669580, F03370, AA350922, AA356989, AI421079, AV728282, AW771706, N76124, AI189033, AA584498, AI961771, AA953572, AV719696, AA467957, H04879, BE159220, T69889, AV720543, H97020, AA467904, AW074001, AF282520.1, AC073310.7, AK026100.1, AL030995.1, AL445236.22, AC023160.31, AK027219.1, AC003977.1, AC008945.6, AI271735.1, AC012172.6, AL161415.2, AL139125.18, AC002217.1, AC023892.35, AL512629.7, AC069228.26, AC011998.8, AP000075.1, AC008651.7, AL133238.3, AL359816.16, AL121694.4, AP000639.4, AC004029.1, AL121757.7, AC002349.1, AC027304.3, AC004397.1, AF003627.2, AC018637.3, AL355615.12, AB038653.1, AC011755.7, AC022468.5, AL13325.20, AL356113.8, AL121986.12, AC004636.1, AL356213.10, AL390023.8, AC008496.5, AC009812.17, AL136374.4, AC007388.3, AC005280.3, AL133404.8, AC012309.7, X14975.1, AL133240.3, AL158069.16, AC011310.3, AL356782.14, AL158055.12, AC010285.4, Z84482.1, AL359950.4, AL034428.4, AC010145.9, AL441887.9, AC003085.1, Z83836.2, AC025420.26, D86996.1, AC007392.3, AC007207.22, AC020717.3, AC022316.18, AP002532.1, AC012323.7, AC026413.5, AL590792.1, AL031387.4, AC022083.6, AL512885.4, AK021525.1, AC005614.1, AC008162.3, AL136170.12, AF248484.1, AL033524.11, AC079175.24, AC007051.3, AF127577.2, AC016396.5, AL132715.3, AL359398.2, AP000626.5, AC073095.3, AL353580.7, AL354758.14, AJ251973.1, AL034545.1, AC004551.1, AC068812.13, AP001669.1, AL590404.5, AC010276.6, Z73497.1, AC013355.7, AL031775.1, AL049570.11, AL590387.7, AC008518.3, AC003670.1, AL160236.4, Z95114.19,</p>

					AC025212.5, AC017060.7, AL031224.1, AF127936.2, AC004703.1, AC018641.3, AC009037.6, Z81007.1, AL365179.30, AL031321.1, AL158841.6, AC007917.15, AL031320.6, AC005730.1, AL049589.15, AL121775.3, AC004692.1, AC007671.7, AC012531.11, AC003686.1, AL121833.10, AC003687.1, AL138807.12, AL136382.6, AC011752.2, AL445246.4, AB045358.1, AL356108.12, AC005157.1, AC017088.8, AC006004.1, AL450333.13, AL031119.1, AC004998.2, AC073141.4, AC003961.1, AL133211.9, AL445239.8, AL356005.9, AL133462.23, AF170702.1, AC005250.1, AL159990.12, AC087083.2, AC026351.28, AL159976.9, AL034407.1, AC003666.1, AL137016.11, AC017099.11, AC003955.1, AC063951.22, AC008038.1, AK021760.1, AL023773.1, AF128525.2, AC024057.4, AC087187.1, AC010411.6, AL392166.19, AL163207.2, AC007907.2, Z98036.1, AC087258.14, AC007502.5, AK024101.1, AL035671.5, AC019197.7, AC007870.3, AF303386.1, AL161426.7, AL132639.4, AL512363.11, AC068723.5, AC020637.9, AL360294.11, AC010365.5, AL354943.9, AL445468.8, AL109854.10, AC004070.1, AC004650.1, AC073130.3, AC026214.3, AC087092.1, AC005747.1, AC006565.4, AL034417.14, AC010583.5, AL109742.12, AC013602.4, U96409.1, AC009225.3, AC008561.4, AP002448.3, AP000457.3, AF128894.1, AC008083.23, AL359704.9, AL118519.25, AC010632.6, AL160397.17, AC007631.3, AL157791.4, AC018696.4, AC004043.1, AC000126.1, AL445310.9, AL049177.5, AL162414.11, AL512348.8, AC004825.2, AL161938.6, AL355381.11, AL358522.23, AC007551.1, AL136315.9, AP002982.2, AL356311.6, AL161804.4, AC018833.3, AC079631.16, AL360270.18, AC020905.8, AL117381.32, AC007001.2, AL136129.23, AL109942.13, AL109656.10, AL157933.19, AB043547.1, AL390237.9, AC025519.10, AL359197.20, AC005284.1, AP001331.1, AL391495.16, AL451146.7, AL035494.8, AL353788.33, AL163953.3, AC004189.1.
HCFCU88	85	553587	1 - 839	15 - 853	N21179.
HCFMV71	86	526599	1 - 386	15 - 400	AI916386, AI392712, BG035021, AL135901. 23.
HCFNN01	87	430297	1 - 1247	15 - 1261	BF592932, AI660093, AI917105, BE502245, AI435489, AI168436, BF131228, R69799, R67877, R81389, AW170015, R34017, D51015, AI283968, R69800, F08994, F08984, T16467, R81390, R67878, R33479, AI581033, BF981109, AL110306, AI929108, AI538885, AL046944, AI889189, AW858243, AL039390, BF795712, BG257535, BE963035, BG110517, BG029667, AI433157, BG252929, AI539771, AW162194, AI345688, AI537677, BF811804, AI500659, AI815232, AI801325, AI500523, BF812438, AI500714, AI433976, BE885490, AI923989, AI284517, AI500706, AI445237, AI491776, AW151138, AI521560, AI500662, AI284509, AI866573, AI633493, AA470491, AI434256, AI888661, AI284513, AI888118, AL045626, BF911521, AI671642, AI036403, AW022808, AL041150, AL513577, AI620284, AI582932, AI888665, BF812963, AI828574, AW022682, AW023338, AW673679, AI274759, AI554821, BG260144, AI648567, AW151136, BE877142, BE047852, BE897632, AL048656, BF338002, AI494201, AI889168, AI866465, AI535008, AI538850, AI623736, AI872423, AL046926, AI440252, AV729760, AI582926, AL045500, AI539800, AW172723, AI440263, AI866469, AL513991, BE886728, AI434242, AI805769, AL513597, BG120706, AI859991, AI436429, AI889147, AI355779, AI371228, AI590043, AI491710, AL047422, AI866786, AI866003, AI610557,

				AI242736, AI887499, AI539781, BG109270, AI539707, BF965814, AI559957, AI690389, AI521571, AI363957, AW087199, BE260438, AI371251, BF055899, AI887775, AL513977, AL514473, BE537531, AL042377, AL514563, BF529870, BF725001, AW935969, BF054877, BF527014, BF092710, AV681756, BF971016, AL079963, BE965432, AL079960, AV682040, AW087445, AW089557, BG108350, AW150578, BF812961, AI491852, BE895585, BE875407, AV713079, AI345778, BG255895, BE968711, BF970768, AI468872, AL119863, BE612681, BE908335, BG114985, AI954422, BG249582, BF726237, AW827289, AI866510, BE047833, BF726207, BE910373, BF793176, AI890907, BF911517, AL120588, AL513757, BF812960, AL037454, BF812938, AL514763, BF970652, AL038778, AI889148, BF680133, AV741327, AI687166, AI273179, BF970449, BF032768, BF856052, BG151388, BE785868, BF338723, AI537273, BE876033, BE874133, AW020693, BG252040, AI275175, AW827276, AI364788, AL038565, BG179993, AI269862, AW827206, BF038131, AI582912, BG107844, AI866461, BE880182, AI923046, BG058150, AI801793, BE964614, BF339322, BG110684, AL042551, BE047691, BF822127, AL513905, BG027628, AI499463, BE047952, AV682502, BE783752, BE018334, BG180295, AL514579, AW020397, AW983783, AW090393, BE878014, AW129929, AI610362, AL514809, BF726183, AI254727, BG118199, BF924855, AL117435.1, BC000090.1, AK026642.1, AB062750.1, AL122050.1, AL137533.1, AF056191.1, BC005168.1, BC008282.1, BC001844.1, AL122110.1, AK024538.1, AL512733.1, AL512689.1, AL389935.1, AL080124.1, AK000083.1, AL137479.1, AK024992.1, AF218014.1, BC008280.1, S78214.1, AL049382.1, AK026480.1, AL137550.1, AB056420.1, AL096744.1, AK000391.1, AB055361.1, AK025465.1, AL137480.1, BC006195.1, AL136749.1, AK026592.1, AL136893.1, BC000785.1, BC004905.1, X72889.1, AB052191.1, AL049283.1, AK026597.1, AL512684.1, BC008899.1, AK026959.1, AB056809.1, AK024546.1, BC006412.1, AK027136.1, S61953.1, AB063093.1, AL110221.1, AL359615.1, AL136882.1, BC008488.1, AK027096.1, AK027146.1, AL359601.1, AK026532.1, BC005858.1, AF146568.1, AK026534.1, BC002750.1, AL162008.1, AL110196.1, BC003614.1, AB050410.1, BC009310.1, AK025435.1, AB055303.1, AB060887.1, AL117394.1, AL133565.1, AK024594.1, AL133560.1, AK026408.1, BC008387.1, AK026353.1, AL049430.1, AL359600.1, AL136844.1, AL117416.1, AK026784.1, AK025092.1, AF159615.1, AL137574.1, S69510.1, AL162062.1, AB052200.1, AB047631.1, AK000323.1, AL122093.1, BC007031.1, BC008070.1, AL136622.1, AL050024.1, AL133640.1, AK026164.1, AB060879.1, AL137459.1, AL442082.1, U80742.1, AL050393.1, AL110280.1, BC008382.1, AB055315.1, AL137529.1, AL117460.1, AF090900.1, AL117457.1, AL137658.1, AL110222.1, BC001967.1, AK026045.1, AB063046.1, AK027182.1, AL136789.1, AK026927.1, AF111847.1, AF104032.1, AF078844.1, AK026533.1, AL137283.1, Y16645.1, AB060826.1, BC004349.1, AK000445.1, AK000432.1, AJ299431.1, AK000212.1, AK027164.1, AK026608.1, AK026600.1, BC008893.1, AL137294.1, AK027113.1, AF097996.1, AB055370.1, AB050510.1, AK025339.1, AL162006.1, BC001098.1, AL442072.1, AK025484.1, AF111112.1, AL512719.1, AK026647.1, AL359596.1, AB047904.1, AB060825.1, AK026506.1, AF090896.1, AB063100.1,

					AL137521.1, BC000778.1, AL050277.1, AL122049.1, AF218031.1, AL137478.1, AL133080.1, AL136786.1, D89079.1, AK025084.1, AK025209.1, AK027204.1, AL050149.1, AL050116.1, AK027142.1, AL359618.1, AL353956.1, BC004556.1, AL136586.1, AB062978.1, AL162004.1, AK027868.1, X82434.1, AF353396.1, AF125948.1, AL122118.1, AK026542.1, AL136892.1, AL133072.1, AF057300.1, AF057299.1, AF271350.1, AB049892.1, BC008780.1, AF100781.1, AL162083.1, BC004529.1, AF245044.1, BC005890.1, AB055374.1, BC004951.1, AL122111.1, AK026741.1, AK000074.1, AK026613.1, AB060916.1, AL133557.1, BC007680.1, AF061795.1, AK025015.1, AF151685.1, AL122045.1, AL583915.1, AL080148.1, AY026527.1, AB056768.1, AL122121.1, BC003687.1, AF061943.1, AB019565.1, AF094850.1, AL136928.1, AK026855.1, AL512718.1, AK024588.1, AL049466.1, AB048964.1, AK025967.1, AK026528.1, AL049452.1, AL137271.1, AB060837.1, AL353957.1, AL117583.1, AK025414.1, AB060908.1, AK000647.1, AK026762.1, BC008417.1, U68233.1, AB055368.1, BC006525.1, AF262032.1, AK025772.1, AL137558.1, AL050108.1, U38847.1, AL136845.1, AL080126.1, U42766.1, AL136787.1, AF242525.1, AL137292.1, AL137463.1, AL136799.1, AF285167.1, AK024524.1, AL359941.1.
HCFOM18	88	553582	1 - 625	15 - 639	AC007374.6.
HCHNF25	89	135227 0	1 - 3562	15 - 3576	AL528465, AL519763, AL526785, AL520938, BE792140, AL520937, AL527998, AL519764, AL528505, AL526872, BE796431, BE746920, BE383840, BE790802, BE277211, BE253824, BF314475, BE796466, BE515157, AL522365, BE792677, BE561212, BE905641, BE902997, BE744397, AL524630, AL528908, BE514253, BF310540, BF569123, BE906475, BF206368, BF528971, BE887141, BE791917, BG026441, AL522366, BG115233, BF973161, BF568333, BE250017, BE396510, BE903106, BF347981, BF220140, BF128023, BF310318, BE780328, BE267959, BE783597, BF972622, BE397012, BE396688, BF127846, BG105951, BF219907, BF206556, BE789125, BG113261, BF183102, BE893242, BG026796, BE271726, AV753314, BG107642, BF965674, BF185761, A1625920, BF681098, BE909654, BE561350, AW275869, A1738622, AW007183, BE909375, BE784249, BE901071, BE785884, BE621366, A1860983, BE855860, BE252957, A1685085, AW250561, BE260127, AW270016, A1634191, BE300918, BE398115, BE782484, A1709014, BG036598, BE264246, BE294812, BF983181, A1670007, AW131857, A1880395, AW117176, BF104971, A1813518, BE909039, BE621619, BE795421, AV760771, BE394970, BE966882, BG257502, BF037247, AW573314, BE545785, AA203110, BE207736, AW665822, AW188410, AA652478, AW592610, AW248680, AA146975, A1954083, AA147767, A1669418, A1147761, A181845, AW241902, BE786856, A1160413, AW732763, BE880512, BE900799, A1081515, BE251158, BF677734, A1203977, BE348436, BE305074, BE296342, BE273772, BF304443, AW005522, BE561489, BF592041, AA701486, AW956672, A1567481, A1568647, A1041032, AA974916, W37397, BF313875, AW025321, AA156467, BE207298, AA404355, AA129237, A1718057, AA593316, AA478160, AA464385, AA488430, AA993638, AA806763, AW627783, AW151216, BE350585, AA147827, A1950821, AW015199, AA994961, A1149434, A1123393, A1123891, A1384079, A1439003, A1355387, AA835483, AA553902, AA761282, AA588042,

					AA465513, AA837073, AI334266, AI750141, AA994585, AI927130, AW328560, AA814189, AI074868, AW026369, AW027702, AA418840, AI568234, AA186580, AI560154, W22355, AI032032, AW954170, AA736383, AI479017, AI088827, AI291333, W92231, AA971299, AI188850, AI961528, AA731626, AA488156, AA411207, AA278716, AI189954, AA586725, AI858753, AA478159, BE206832, AA485920, AW959617, AI658538, AW182215, AI263970, BG027674, BF589634, AA808611, AI083503, AI028440, AA972598, AI460137, AI354691, AI366814, AI570826, AI872174, AI633718, AI333776, AW272455, H98820, BF732893, BE395014, AI369603, AA410975, AI277588, AA723380, AI807881, AI130985, AI151181, N64392, AI928081, AA526988, AA635110, AA780721, HI2028, AI278481, AB016492.1, AB016493.1, BC000499.1, AB016488.1, AF115850.2, BC001363.1, BC000996.2, BC001667.1, AF131797.1, BC004239. 1.
HCM5Q56	90	740781	1 - 1248	15 - 1262	AI243049, AA778231, AI248811.
HCM5T14	91	562010	1 - 600	15 - 614	BG151538, AL522395, AI027081, AI740814, AI494502, AI015586, BF509495, AI266344, AI571396, AI885328, F20480, AI419069, R85269, BE048073, AI473362, AI079992, BF109599, AI423992, AI863372, AI167701, AI094506, AI366530, H41404, AI369445, AL522396, F33637, AI205176, BG249703, BE883522, AA700993, AA083529, AI361652, H18420, F33838, R87521, BF032259, N92412, R49269, H51127, BF969837, AA719619, R85859, F20255, R88822, AA322151, F23458, R87493, AI624511, BG168884, F34788, AA348976, H45956, F11003, AI470980, AW836330, AI829330, BE907179, BE789764, AW161579, AI567582, AI640729, BE965724, F37471, AV710208, AI591387, AI866465, BG105895, AW827227, BF337602, AL042400, BE536058, BF750879, AV683513, BF527014, AI457113, AI540674, BE964614, AI270350, AI348777, AW020710, AI335208, BG032036, BE965347, BE965621, AA908294, BF752999, AW059828, AW089640, BE874133, BF814357, BF753023, AV756795, AW082060, AI830029, AL036631, AW806761, AL047275, BF344047, AI335426, AI581033, AW264895, BG121959, AI564749, BF032768, AI872051, BF753055, AW673679, BE047952, BF752353, AI348969, N71180, AI288285, AI630252, BG180273, BE541445, BE907439, AL039086, AI143013, AW071417, AL048644, AI348854, AI307557, AL046835, BE540578, BF885082, BG178351, BF815930, BE965432, BG029053, BF971203, AI500061, AV726816, AW953787, AI766348, AA641818, AA760697, BF924856, BE963838, AV734082, BE138658, BF766529, BG178755, AW162189, BG028631, BE069307, BE047833, AI340603, BE781369, AI923989, AI623941, AI348897, BF792047, BE906419, AW059713, BF909758, AW168544, BG029667, BG113299, BF342475, AI678989, AW089801, AI695129, AA420722, AW082623, BF925370, AI440263, BG114104, AL119836, AI828574, BE176248, AI865116, BF885675, BE964767, AI920809, BE895585, BF339322, AI702065, BE897632, AI340519, AL038564, BF924884, BG253692, AI436429, BE155168, AI565172, AV682875, AI345415, AW148758, BG026640, AI499986, AA572758, BG001235, BG058150, BF812963, AW169587, AI345745, BF970768, BE908921, BE964512, AI344935, BE965355, AW269097, AI918554, AW151979, BF814447, AI366968, AI335363, AL040694, AW075084, AI500523, AV742698, BF904194, BE164610, BE885490, AV746791, AW020693, AI284517, AV739574, AI345224, AW059638,

					<p> A1336513, A1921734, AW12723, BE966699, A1309306, BG105800, AW935969, BF796447, BF811793, A1348895, A1345347, BE909398, BF853807, AL121463, AW151136, BF753056, BF345043, A1336495, A1345397, BF816811, AA493647, BF764538, A1311892, BG105110, BE965121, AL515173, AW071380, BE965067, BF822127, AC010149.8, AL389935.1, AL512750.1, AK024538.1, AB063079.1, BC007198.1, AK027121.1, BC002839.1, AK026506.1, BC003619.1, AL136864.1, AL161953.1, BC004943.1, AK027193.1, AF303581.1, AF178432.1, AB052191.1, S78214.1, AK026600.1, BC002466.1, AL133565.1, AL137479.1, BC007567.1, AK024524.1, AL512765.1, BC004181.1, AL137521.1, AL110218.1, AF358829.1, BC004925.1, AK000310.1, AF321617.1, AF110329.1, AL049466.1, AL389957.1, AK025349.1, AL137294.1, AL110225.1, Y16645.1, AL137476.1, AK026522.1, AK026434.1, AL137641.1, S77771.1, AF078844.1, AL122050.1, BC004530.1, AL389939.1, AK000083.1, AK025491.1, AB055368.1, AL050116.1, AF125948.1, AK026624.1, AK026865.1, BC002457.1, AL353957.1, AB055352.1, AB048974.1, AK027188.1, S76508.1, AK026547.1, BC008416.1, BC004899.1, BC001967.1, AF143723.1, BC006414.1, AL133104.1, AF353396.1, AF097996.1, AL080074.1, AB048888.1, AL136644.1, AL049314.1, AK026797.1, AB048975.1, AL359601.1, BC006525.1, AL050108.1, AL133031.1, AL136749.1, BC003627.1, AB055370.1, AF132676.1, AF069506.1, BC004265.1, AF061836.1, AK026762.1, AB060929.1, AK027217.1, AB062938.1, AK026649.1, AK027144.1, AK025484.1, AL133606.1, AK027868.1, AK025378.1, AF218014.1, AL137560.1, AK026947.1, AL117394.1, AB063100.1, AL122121.1, AK026592.1, BC003052.1, BC008387.1, AK025967.1, AB050411.1, BC006508.1, AB050534.1, AK025414.1, AF183393.1, AK027204.1, AB060825.1, AK027614.1, AF155827.1, BC002574.1, BC007499.1, AL133560.1, AL122110.1, AK027113.1, BC008070.1, BC005151.1, AK026480.1, Y10936.1, AB060873.1, BC006106.1, BC000094.1, BC006440.1, BC004362.1, AL162006.1, AK026855.1, AL080162.1, AL110221.1, AL583915.1, AL122093.1, AL133113.1, AL050092.1, AL137548.1, AL136805.1, AL137539.1, AB050427.1, AK024588.1, AK000418.1, AL050024.1, AB050410.1, AB047615.1, AK025906.1, BC006103.1, AL133081.1, AB047930.1, BC001963.1, BC001964.1, AL117649.1, BC007680.1, BC001056.1, AF262032.1, BC003684.1, AL117435.1, AL137555.1, AL080163.1, AL133112.1, AF230496.1, AB055290.1, BC004533.1, AC024247.4, BC009284.1, AF026816.2, AL136928.1, AL137556.1, U54559.1, BC003683.1, BC009311.1, AK027096.1, AB047887.1, AB047623.1, AK026642.1, AL512718.1, AL049382.1, BC002798.1, AK026626.1, BC004256.1, AL117460.1, AK026630.1, AF090886.1, BC003548.1, AF058921.1, AL023657.1, AF036268.1, BC007534.1, BC002750.1, AL133077.1, AL359615.1, AF111847.1, AL133568.1, BC004264.1, AF090901.1, AY026527.1, AL136892.1, AK000690.1, AL136882.1, AL359618.1, U88966.1, AL049465.1, AL137712.1, BC008196.1, AB048953.1, BC002643.1, AF051325.1, AL133640.1, BC004951.1, AK026885.1, AL050172.1, AL122111.1, AL136915.1, AL13624.1, AK027213.1, AF218034.1, AK025798.1, BC008719.1, AB063071.1, AF217982.1, AB055303.1, AK000753.1, Z37987.1, AC021325.5, AB060887.1, AL136747.1, AK026927.1, AL162085.1, AC002464.1, AY033593.1, BC006201.1, AK026631.1, AL137480.1, </p>
--	--	--	--	--	--

HCMTB45	92	862367	1 - 944	15 - 958	<p>X53587.1, Y10080.1, S61953.1, BC003687.1, BC004958.1, AB055361.1, BC000051.1, AL050277.1, BC003105.1, BC006210.1, BC007280.1, AL133558.1, AL137640.1, AL049430.1.</p> <p>AI982745, AA593146, BE815960, AA614229, BF909425, BF909434, BF909438, BF943834, BF874887, BF875598, BF868852, BF733544, BF896106, BF987376, BF942939, BF943835, BF875612, BE083383, BF911435, BF905359, BE001389, BF846180, BF908767, BF908691, BF909563, BF805281, BF808094, AW850674, BF807161, BF926033, BF909560, BF908693, BF868849, BF943838, AW843089, BF942943, BF807164, BF908765, BF810304, AW850761, AW898529, AW603507, BF943837, AW878618, AW905142, BF874446, AA559987, BF874408, BF911325, BE001388, AW898530, BF911326, AW840660, BG002961, AW799769, BE094456, BF895127, BG002880, AW935365, BE079182, BE075548, AA577987, BF876370, AW878617, BE676937, BF874402, BF891040, AA578162, BF845946, BE079011, AW794602, BF848926, AW860058, AW860057, BE077227, BF962704, BE075582, BE143663, BF899584, BE079012, BF934749, BF868853, BE173882, BF943286, AW243946, AW842760, AW900160, BF749304, BF991483, BE146291, BG003356, AW878382, BE093966, BE094492, AW878361, AW850175, BF990699, BF763613, AW795548, BF991481, AA577947, BE094775, BF908768, BE737951, BF909561, AW876835, AW793954, BF945209, AW850296, BF987385, BE183543, AW850608, BE149153, BE173892, BE166207, BE083436, X93859, BE085444, AW850165, AW842027, BF896589, BF848896, H46872, BF929095, BF915113, AW878512, BE168755, BF757183, BF942940, BE069882, AW842732, BF130497, BF911514, AA507747, BF743882, AW842761, BF762630, BF801985, AA578501, BE048291, AW842705, AW878502, AA687183, AW861010, BE350403, BF899540, BE085445, BF909734, AW004686, AW878365, AW878421, AW878425, BE698162, AW973752, BF755593, AW793897, AW793781, AW856466, BF820139, AW794164, BF961409, AW973899, AW842714, AW177647, AW277006, BG059382, AW901657, AW796714, AW276720, AA559135, BF942904, AW878428, AA572780, AW602069, AW869494, AA558407, BF878034, AW875187, BF478266, BF755372, BF988980, BF988994, AW878358, BE079252, BF987178, BF922796, AW878515, AW995668, BF799418, AW884119, AW794084, BF868850, AW841660, AW176716, BF801119, AW796713, BF991856, BE072628, AW899525, AA504031, BE094779, BF924085, BF953080, AW793783, BF993459, BF842275, AA533288, BF997143, AW901658, AW855931, BF989697, AI039720, BE073329, BE074146, BE711639, AW793985, AW899524, AW992030, AW833203, AW793745, AW878368, BF892669, AW878427, BF897797, BE167882, AA506964, BF734122, AW812373, AW841148, BF593602, AW855166, AA507313, AW878504, BF890845, BE077159, AA558017, AW878510, AA558350, BF764081, AW878383, AW793822, AW857626, BE709449, H22072, AW901660, AA400639, AW878363, AC011994.10, X01037.1, X04248.1, X04252.1, X04249.1, X04251.1, M20910.1, AL139099.2, AL353733.14, AC090950.1, X04250.1, AC055740.17, X62364.1, AL136303.15, V00477.1, AF068289.1, AC006088.1, AL031657.5, X04254.1, AL354696.11, D16583.1, AL391647.16, AL139415.10, AL136359.13, AL162615.13, AC006101.3, AC002464.1, AL133230.25, AP001728.1, AF283569.2, AC006059.3, AP000501.1, AC004983.2, AL158817.11,</p>
---------	----	--------	---------	----------	--

HCNSB61	93	526413	1 - 698	15 - 712	L44140.1, AC008383.8, AL020993.1, AL359541.11, AP000338.2, AP000216.1, AC004895.2, AP001760.1, AC008397.7, AC003976.1, AC003684.1, AF111168.2, AC005325.1, AC008764.7, AC024952. 4. AW964468, AW975618, AV741221, AW966389, AV738928, AW949645, AV727978, AW966053, AV724520, AV701357, AV738340, AV731070, AW978633, AW964532, C14331, AW966330, AW960553, AV742090, AV723247, AV744012, AV718489, C14429, AW352117, AW752082, AV702035, AW753053, AW177440, D80045, AW949642, AV744690, AV718800, AW360811, AV741220, AW178906, AV718692, AW375405, D59927, AV742048, AV718707, AW973541, AV721784, AW753067, AV701125, AW178893, AV701216, AV701166, AV701149, AV742001, D80268, AV649986, AV720791, T03269, AW377671, C14389, AV649974, AV720211, AW179328, D80134, AA514186, AV701224, AV701154, AW966029, AW752110, AW966075, AW966065, AW960465, AW973334, AW966531, AW978634, AW966534, AW179332, AV742667, AV742022, AW966560, AA305409, D58283, AW966022, AV701335, AV742430, AV744662, AV701043, AW959799, AV701332, AV701017, AV701248, AV701431, AW966059, AV723097, AW966013, D59859, AW964766, D80022, AV726390, AW966041, D80166, AW973474, AW966378, D80195, AW975621, AW978648, D80193, AW975613, D59467, D51423, D59619, AV701443, AW978661, D80210, D51799, AW965163, D80391, D80164, D59275, AV720533, D80240, D80253, AW966030, AV719822, AW966054, AV720203, AW366296, AW964756, AW966050, AV719188, AW973307, D80043, D59787, D80227, AW966062, AV719324, AV718440, AV718938, AV719783, AV720028, D59502, AW959597, AV718633, AW959628, AW960473, AW965177, AW975605, AW959570, AV719468, AW965185, AW965197, AW965196, AW973485, AW965184, AW973488, AW965175, AV718931, AV720878, AV718844, AV720464, AV719557, AW360844, AV718770, AV720731, AW973482, AV720150, AV699447, AW378532, AW958992, AW958993, AV722801, AV723927, AW959136, AW956397, AW959062, AW964477, AW956434, AV699550, AW964488, AW949641, AW962082, AW949656, AW360817, AW949654, AV699927, AW177501, AW959202, AW177511, D80132, AV720151, D81030, AV699746, AW375406, AV726921, AW378534, AW973490, D80212, AW377672, D80196, D80188, AW179023, AV741187, AW178905, AV741198, AV741191, D80219, AW973468, BF349328, AV705680, AV649966, AW973423, AV718530, AW962395, AV650003, AV701123, AW973470, AV699866, AW973473, AA305578, AW973445, C15076, D80038, D59610, D80366, D57483, AW179329, AV720616, AV701130, AV701419, D51022, AV701422, AV758213, AW966043, D81026, D50979, D50995, D59889, AW753041, AW178762, AW962245, AW973447, C14014, AW966023, D80024, AW959469, AW964737, AW960454, AW966032, AF271371.1, D34614.1, X67155.2, AF058696.1, D88547.1, AB028859.1, D50010.1, AB002449.1, U79457.1, AB038216. 1.
HCNSD93	94	630649	1 - 1092	15 - 1106	AV700008, AV699462, AV699991, AV699989, AV699993, AV700164, AA633033, AC011331.2, AB047608. 1.
HCNSM70	95	637547	1 - 1075	15 - 1089	AW170355, BF437750, AA781956, AA304933, BG260457, H48606, AW517161, AA088807,

					<p>BE004003, AV654505, W61215, H77296, AI185059, AW150806, W60968, AA447295, BF340135, AA336903, BE140648, AA857929, AW572088, AI220250, AW827119, BG122481, AI633419, BF726207, AA580663, AW071417, AI345745, AI886123, AV681726, AI358701, AI698401, AI135661, BG168549, BG113188, BG179993, BF727034, BG178911, AW148356, BF970449, AW020095, AI478123, AL079963, AL036396, AA292158, BE904051, BF764516, AI783997, BF816037, BE785868, AV681618, AI500706, BF904265, BG114104, AI927755, BF970768, AV693410, BG110517, BF812933, BG121959, AI538764, AL036146, BG107576, AL039086, BE965432, BE047833, AW673679, AL537364, BF827575, AI537515, BF814420, AI312428, BE964614, BE895585, AV682414, AI923989, AI866770, AI345347, AW059828, BG165051, AA833760, AV755793, BE964981, AI863321, BG035511, AI521012, BG179633, AW806761, BF812936, AI251221, AW022682, AL119863, AI859464, AW129106, AI282355, AI699865, AV704696, AW935969, AW946806, AV682001, BF338465, BG058150, BF527014, AW074993, AI349614, AW022699, BF338002, BF904244, BG034550, BF970990, AL038504, AW051088, AI886192, AA572758, AL036631, AI349256, AI312152, AW269097, BG030364, BF753056, AL119049, AV682510, AW075084, AW073697, BG109270, BG163618, AI349937, AW983691, AV746964, AI921248, AI611738, AI334884, AI307543, AI348897, AI619502, AI677796, AI632408, AI886181, AW079572, AW071412, AI802542, AI307708, AI620089, AA449768, AI863382, AI288305, AI312325, AW118518, AI499285, AI340659, AW983829, AI886753, AI873644, AI570807, AW168485, AI933589, AW026882, AI635067, AI923370, AW130930, AI336495, AW268072, BE138658, AI783504, AI868931, AI784230, AW149925, BF812960, AI537261, BF885000, AI432040, BE047852, AI620284, BF812938, AI334930, AI309443, AL038605, AI445992, AA908294, AI445990, AI307520, BF970652, AI284517, AI345737, AW269098, AI434741, AW151138, AI308032, AW268251, AI538342, AI433157, AL514879, AI345739, AI702073, AI312143, AL036802, AI345736, AI366992, BE908921, AI344785, BF812961, BG256090, BE880923, BE536058, AI801325, BF032768, BF856052, AL036403, AW198144, AW193134, AV716613, AI349955, BF054789, AW827276, AI364788, AW075093, AL036980, AI499986, AI500061, BE789764, AI590120, AI312357, AL047422, BE886827, AW268768, BG150947, AI500662, AI890907, AI633125, AI589267, AI698391, BE541445, BF885675, H89138, AI500523, BF343172, AI915291, AW152182, AA640779, AL036265, BG029667, BG168185, AI582932, AI554245, BG108406, BF814516, BG180996, BF339594, AI335426, AF304447.1, AF275945.1, AF030455.1, AK024538.1, U58996.2, AK000486.1, AK027114.1, BC004958.1, AK026045.1, AL389939.1, AL512733.1, AK000083.1, AL157482.1, S78214.1, AK026741.1, AK025484.1, AL049430.1, AF210052.1, U42766.1, AL512718.1, AL1049382.1, AB047801.1, BC007326.1, X69819.1, AB056809.1, AK026593.1, AL133072.1, AK024524.1, AK026504.1, AF218031.1, AK026784.1, AL136843.1, AB052200.1, AL157431.1, AK027868.1, AL049300.1, AL050024.1, BC003684.1, BC009033.1, AB060908.1, AL137292.1, AK025491.1, AL136799.1, BC008280.1, AL359601.1, BC008488.1, AF104032.1, AF078844.1, AK027113.1, AL162008.1, AL137550.1, AB060929.1, AK027116.1, AK026534.1, AB055315.1, AL137526.1,</p>

					AK024588.1, Y16645.1, AL122050.1, BC008899.1, AK026959.1, AF177336.1, AL512719.1, AL359615.1, AL117394.1, AL133560.1, AL050393.1, AL122121.1, AB052191.1, BC006807.1, AL512689.1, AK026608.1, AK026600.1, BC006525.1, AL110225.1, AL133606.1, BC008983.1, AK026464.1, X82434.1, BC005890.1, AK026086.1, BC002839.1, AB055374.1, AL136540.1, AB055368.1, AL512765.1, AF056191.1, AL512754.1, AK026592.1, AK000137.1, AK025414.1, AB056420.1, AL096744.1, AF162270.1, AK026855.1, AF057300.1, AF057299.1, AL136749.1, AL133067.1, AL122049.1, AB063008.1, AB048974.1, AL162006.1, AL512746.1, AK026630.1, AL110221.1, AL117457.1, AL133016.1, AK025772.1, AL050108.1, AL122093.1, AF230496.1, AL512750.1, AK026526.1, AK026480.1, BC002643.1, AL117583.1, AJ242859.1, AK026927.1, BC007199.1, AL080060.1, AK026528.1, AK026629.1, U39656.1, AB060916.1, AK026462.1, AF146568.1, X98834.1, AF285167.1, AK000652.1, AB060912.1, AF090934.1, BC008070.1, AB060826.1, AB048953.1, AK026597.1, AB063070.1, AK000445.1, AK026642.1, AL137271.1, BC005168.1, BC004951.1, AK026744.1, Z82022.1, AF217987.1, AK027204.1, AL359618.1, AB060852.1, AL080127.1, AF090900.1, AF090903.1, AL049464.1, AK025524.1, AL137533.1, AF111847.1, AL353940.1, BC004556.1, AF090901.1, AB062978.1, AL136787.1, BC008387.1, AJ012755.1, AK026865.1, AF097996.1, AL133093.1, AF051325.1, AB047615.1, AK025958.1, AK026506.1, AL080074.1, AF113222.1, AK025312.1, AK026452.1, AL050116.1, AK025254.1, BC007021.1, AL442072.1, AL137527.1, AF106862.1, AL136805.1, X53587.1, AL136928.1, AL049466.1, AF353396.1, BC003683.1, AL137478.1, AK025906.1, BC001967.1, AB047904.1, AL359596.1, AB063046.1, AL137459.1, AK026762.1, AL117460.1, AK025798.1, AL133075.1, AL136789.1, AL117440.1, AK000391.1, AL050277.1, AL117432.1, AL049452.1, AL049283.1, AK026353.1, AK025209.1, AL133098.1, AB055366.1, BC001045.1, AB048975.1, BC003687.1, AB055361.1, AL133113.1, AB056768.1, AL117435.1, X65873.1, AL133565.1, U91329.1, AL080124.1, AL162083.1, AK026583.1, AL390154.1, BC008417.1, AL137560.1, AL133640.1, AK025084.1, AB048954.1, AL136635.1, AK025092.1, AB062938.1, BC002733.1, AL136768.1, AF262032.1, AF090896.1, AL136845.1, AL136892.1, AL137521.1, BC008365.1, BC009341.1, AF061943.1, AL122110.1, AL359941.1, AK027096.1, AL512684.1, AL110196.1, AF217966.1, AL133080.1, AB051158.1, AK000432.1, AL162003.1, AB050510.1.
HCOOS80	96	113497 4	1 - 1240	15 - 1254	AL523700, AL522694, BE613756, AW593997, BE790827, BF526401, BF448973, AW016304, AI400000, BF438433, AW972831, AL522671, AA639399, AW173281, AW665437, AA805253, BG120869, AI125734, AI656792, AW275025, BE614625, AI561207, AI394693, AI095511, AI379330, AL036013, AI374641, AA905729, AA653313, AA807671, AI089517, BE876956, BE963616, AI863503, BG056832, AL523701, R76330, AA325249, AA812964, BF941870, R79509, AA121257, AA527638, AL520580, BF772183, BE378578, R38325, BF515782, BF514354, AA452283, AA779864, R39405, AA121256, BE677848, AA236132, BE395944, AI269580, AL514627, AL513779, AL514089, BF970652, AW192701, AI637584, AL513817, AI478123, BE966479, AW827289, AL513631, AI812107, AI921248, AW104056, AL037081, AI670009, BE965014, AI433157, AI702073, AL514087,

				<p> BF812961, BE960196, AI590530, BG109270, AL513553, AI633125, BG179993, BE047852, AW148408, AL037104, BF032768, AI582871, AI445025, BG029667, AI874166, AL042745, AW192652, AL514701, BE964495, BG178911, AI610690, AI619502, AI627988, BF856052, AI580190, BG112718, BE540365, AI921464, AI653979, AI073952, AI564719, AL514721, AL514867, BE789764, BE967261, AV652443, AI871923, AI288285, AW129916, AL514919, BE965121, AW129722, AI634345, AI612852, AL513781, BF343568, AW129659, AI249877, AI811192, BE966259, BF672397, BE965192, AW087455, AL043070, AL119836, BF344691, AI889376, AL514025, AI681985, AL513947, BE965067, AW073865, AL119791, AL036631, AL513597, AL121365, BE966011, AI915291, AI241744, AW881086, AI677796, AI611743, AI499393, AL513577, BE048135, AI912356, BG251872, BF812960, AL514691, AI956080, AW104827, BE965724, AI286256, BE964070, BE069307, AV726058, BG254754, AL514357, BE910373, AI500061, AW162118, BF904265, BG121959, AW059828, BE964614, AA427700, AI916419, BE874133, AI340603, AI334450, BF812938, BF792961, AL045500, AI866770, AL513977, AL514359, AI348854, AW268220, AI698391, AI688858, AW149311, BF724894, BE047952, AI889189, BE965599, BE963090, AL515413, BF910810, AI687362, AI812080, AI978703, AI567128, AI539771, AI696612, AL134259, AW090071, AI963193, AL513807, BF970768, AW190194, BF814453, AV743962, N71180, AW148457, AI872711, BE887488, BF037097, AW161579, AW151136, AV682488, AI312428, BF814761, AW265004, AI345613, AI669459, AW130134, AW088628, AW104724, AV727963, BE727727, AI349004, AI816010, AI345666, AA572758, AW105383, BE964512, BE966577, AI310575, AF006012.1, AK026019.1, AC003688.1, AL050149.1, AK000445.1, AL049938.1, AK026592.1, AL359615.1, BC002733.1, AL137480.1, AL512746.1, AK026629.1, BC007021.1, AF217966.1, AK027868.1, AL137271.1, AK025084.1, BC003682.1, AL050116.1, AK026647.1, AL137459.1, AL133606.1, AL353957.1, AB048954.1, AL117435.1, AF106862.1, AL136786.1, AB047904.1, AK025708.1, AK024538.1, AK026533.1, AL359596.1, AL359601.1, AL096744.1, AL162083.1, BC004265.1, AK026522.1, AF217982.1, AK025312.1, BC008899.1, AL137560.1, AK026959.1, AF090901.1, AL137521.1, U42766.1, AB060912.1, AK027096.1, AL133568.1, BC004556.1, AL136787.1, AL080124.1, AF056191.1, BC008387.1, AK026855.1, BC004370.1, U42031.1, AK026434.1, AL137527.1, AL136892.1, AL137283.1, AL133640.1, AK000212.1, AF090900.1, X65873.1, AB048964.1, AK026086.1, AB047615.1, Z82022.1, AL512733.1, AB060929.1, AL122110.1, Y16645.1, AL122050.1, AK000432.1, AB056421.1, AL049452.1, AL122098.1, AK026784.1, AK026630.1, AL359620.1, AL133113.1, AK026542.1, AB055361.1, AL050277.1, AL512750.1, X82434.1, AK024588.1, AB047887.1, AK025339.1, AB052191.1, AL359583.1, AB060916.1, AK025092.1, BC001045.1, AL133557.1, AB060852.1, AB052200.1, AF125948.1, X98834.1, AL136749.1, X72889.1, AF097996.1, AK025967.1, AB055374.1, BC006440.1, BC006180.1, AF183393.1, AK025632.1, AL353956.1, U78525.1, AL136805.1, AL137538.1, AL136844.1, AL137550.1, AK000323.1, AF111847.1, AL110225.1, AF146568.1, BC006807.1, U91329.1, BC000772.1, AB051158.1, BC008488.1, AL049382.1, BC001967.1, AB055315.1, AK026045.1, </p>
--	--	--	--	--

					BC004951.1, BC008280.1, AK026593.1, AL137463.1, AL162002.1, AF091084.1, AL359941.1, AL512719.1, AL137292.1, AL049283.1, AB048953.1, AK000618.1, AK026744.1, AB060863.1, AK000083.1, AL117460.1, BC003548.1, BC007680.1, AL583915.1, AL353940.1, U80742.1, AF219137.1, AL133031.1, AL389982.1, AL110280.1, AK000718.1, AK026408.1, AL136928.1, AL122049.1, AK026504.1, AB060826.1, AL512684.1, AL049466.1, AL117583.1, AB063046.1, AB055303.1, AL136789.1, AB060887.1, AL117457.1, AF090896.1, AL122123.1, AF230496.1, AL049464.1, AK026480.1, AL133080.1, AL137523.1, AL122111.1, AB060908.1, AK027204.1, AL162006.1, AB062938.1, AK026526.1, AK027200.1, AL512689.1, AL050108.1, AB063100.1, BC003122.1, AL133072.1, AL122093.1, AK026462.1, BC004874.1, AK027113.1, AB063070.1, AK026642.1, AB047897.1, BC005168.1, AK026624.1, AF090903.1, AB049758.1, AL136586.1, AL136845.1, AF207829.1, AK025383.1, AL050146.1, AK026532.1, AL136799.1, BC003687.1, BC008382.1, AF090934.1, AK025391.1, BC002485.1, AB048919.1, AF225424.1, BC008040.1, AK026741.1, AK026452.1, AK000647.1, BC008417.1, AL117440.1, AL442082.1, S78214.1, AL512754.1, AL133560.1, AF078844.1, AK000652.1, AK024524.1, AB055371.1, BC008070.1, AF090943.1, AL512718.1, BC002839.1, AB062942.1, AK025414.1, AK027213.1, AK027164.1, AB060825.1, AB055368.1, AL110221.1, AL162062.1, AL136768.1, AL133016.1, AK026927.1, AL157431.1, AK000690.1, BC007199. 1.
HCUBS50	97	499240	I - 851	15 - 865	T02949, Z62487. 1.
HCUCK44	98	720291	I - 1125	15 - 1139	AL532468, BE621866, AL521895, BE621760, BE538472, AL521894, AV734260, AV723629, BE770935, BE790853, AI140351, BE621673, BG168718, BF793790, BE908998, BE545559, BE616433, BE395052, BE621070, BF664130, BE937841, AI859347, AV696398, BG164550, AW977552, BE731169, BE514231, BE312999, BE717043, AV696286, BF726404, BE018100, BE717057, AA121548, AA768342, BF326554, BF430984, AI864674, AA530873, BF338307, BE717061, BE676694, AA127712, AA722381, AI815642, BE281457, BE717055, BF971805, BE795728, AA987515, BE717048, AW275917, AI354682, AI859814, BF686844, BG035461, BF977210, AW474962, AI025466, N92869, AA768339, BE396293, BE301588, AI051671, AW753719, BE965688, AI920875, BE812296, AW089493, BE535563, AW190165, AA417302, AA130959, AA587755, BE717112, AA045598, N21328, AV712375, AA314322, AA844332, AI371694, AW578738, AA100477, AA043186, AI567303, BE717183, R83064, BE891492, BF809525, AI350331, AI039892, AW193146, AA828283, AI952434, BE717068, AI289086, AW377665, AI014387, AA917482, BE560356, AA975893, N21020, AV758595, AV760858, AA621534, H94056, BE218977, BE741064, AA100476, AW406948, AI564973, AI279835, BF594159, AA417265, AI187288, AA045597, AA306867, BE548903, AA661773, BF027132, W04309, H80956, AW615725, AW088039, AI419448, AI952495, N47889, AI083853, AA649285, AI816957, BE927438, BF029994, AA580315, AW103201, R89903, AI289415, N27984, T40562, BF593347, N80197, AA868207, AI018462, D82429, AI873582, AI955989, H81296, BE616655, AW138496, AI833059, AI288157, T91268, R63140, BE044820, BF594190, AA130829, DI2288, AI699667, AW952882, AI942324, AA310276, W22908,

					<p>AI091426, BE829635, BE829457, BE829712, BE829791, BE829638, AA074395, AA298770, BG165580, DI2293, BE829628, T91580, AV737050, BE536089, AA353671, AA053266, H81350, AI202414, AI832968, AA342277, AW084334, BE833477, W25596, AW886418, BE829841, AA297193, BF382776, AW351513, AW377656, T98269, AA342276, D12294, BF086669, BF084242, BE833566, BF084293, AI908913, BF084274, AI868829, BE771088, BE817957, BF155956, BF084243, BF084295, BF084296, BF086521, BF086673, BF086541, BF093333, BF089556, BF084298, AI220723, BE928502, BE928501, BF797820, BF086673, BF086541, BF093333, BF084260, AA344066, BE870474, BF084210, BF093356, BF093368, BF093353, BF084241, BF084260, AA344066, BE870474, BF084210, BF086528, BF155939, AA382073, AI310801, BE817887, AI866230, BF093347, BE928490, AA807562, BF084199, BF093349, T85780, AI908912, BF095869, T91628, AA193223, BF095965, BE747715, BE928507, BF377798, AL122042.1, AC007842.1, BC004512.1, AP000892.4, N51146, N74141, W38488, AA100050.</p>
HCUEO60	99	499242	1 - 1208	15 - 1222	<p>AV748967, AV762395, AV761362, AV762397, BG104686, AV760057, BF668217, BF677892, AL046409, AV763971, AI284640, AV761489, AI334443, AI963720, AV728425, BG249643, AV763449, AW303196, AV301350, AV735370, AV725423, AV762111, AW274349, BF541120, AV762098, BF241967, AV763255, AV759274, AV761786, AI270117, AV740801, AV763540, BF337291, AV763670, AV762064, AL138265, BF697673, AW833862, AW023672, AV761843, AI305766, BG167139, AI431303, AW419262, AI133164, AW268973, AW088846, AW193265, AV762505, AI696962, BF131362, BF684828, AW472872, AL138455, BE562953, AW963497, AW965008, AA490183, AI281881, AA581903, AA521323, BF827410, AI610920, AV762092, BF311000, AV760937, AV732891, AV763354, AL042853, AV762535, AW979060, AV759505, AW327868, AL119691, AV762826, AW975987, AI754658, AL038785, AI345654, AW501386, AV762645, AV652936, AV763558, AI613280, AV760777, AV733830, AI064864, BE049139, AV761941, BF680074, AV764307, BF965007, AV702857, AW662543, AV734666, AA491814, AV729809, AI345681, AI679782, AL046205, AW500125, AV759352, AW265393, AV757425, AF330238, BF725504, AV699574, AV764228, H71429, AW974109, AV764235, BG109996, BF915247, AW503666, AW502975, AV759204, AA491284, AV761106, AW518220, AW972871, AA521399, AV725431, AI307608, BE276880, AV759507, AA610491, AV764578, AI345675, AW975049, AW973397, AV762009, AV761884, BF991286, AV735495, AI570261, AL041690, AA680243, AV762959, AI144101, AV760486, AL045053, AA587604, AI368745, BF679304, AV710066, AV760466, BF793766, AV761745, AW969629, AA526787, AV763633, AF074677, AI732865, AI350211, AI890348, AW953071, BE150580, AW576391, AW513362, AL037683, AA469451, AU147104, AI708009, AW410400, F36273, BG222267, AV762067, BG036665, AW872676, BE160727, AV719316, AW270270, AW029038, AI732120, AA482711, AW021583, AV763847, AV742057, AV759172, BF691714, AV713243, AA877817, AW088202, AV729947, AV759214, AW960468, AA682912, AV762139, AW072923, AV759580, AV764530, AI345518, AV760106, AI355206, AI625244, AV760736, AV763122, AW872575, AA468022, AW769399,</p>

				<p> AV729881, AV760207, BF915628, AW028429, AV759322, AA533725, BF676981, AL042420, AL473943, AI133102, AV759518, AW438643, BE674881, BE046438, AW408717, AV733627, AI457397, AV733732, AW088616, AV762015, AV757607, BG059568, AW162049, AA584201, AW406755, AW975217, AI929531, AI821271, AV756693, AW970564, AI289067, AA629992, AV762154, AU145314, AW970896, AI357901, AV764241, AW956640, AI061334, AW265385, BF130605, AI567674, AA501784, AA394271, AI339850, AW858127, AI561060, AL162252.17, AL354718.10, M37551.1, D83989.1, X55924.1, AF015148.1, AF015156.1, AL133371.3, U18391.1, U18395.1, U18394.1, AL358913.4, X55925.1, AL353812.13, X54180.1, U57007.1, AL391987.15, U57006.1, X54175.1, AF077058.1, AB020859.1, U18393.1, X55926.1, U57009.1, AL390056.7, AC012351.3, AC010623.7, AC007383.4, U02531.1, AL138810.10, AL298105.1, U67221.1, AC008430.3, AL161896.16, U18392.1, X76070.1, X54181.1, U57005.1, U18387.1, Z84488.1, AC008543.7, AP001692.1, U18399.1, U18398.1, AP001342.1, AL138919.12, AL139289.6, X54176.1, AF015157.1, AC005341.12, X54178.1, AL445932.12, X75335.1, AL391839.9, AC025056.5, AL049633.3, AP000427.3, AC003101.1, U02532.1, AF020803.2, AC013357.19, AL359846.11, U57008.1, AC002460.1, AF015149.1, AC005681.2, AC006004.1, AL135903.12, AC012450.9, AC004862.1, AC005529.7, AC007462.2, AC010513.6, X54179.1, Z22650.1, AC005901.1, AC021001.5, AP000095.1, AC006435.7, AL050312.8, AL354936.21, AP000239.1, AC012380.1, Z99129.1, AC008372.6, AC022274.5, Z97181.1, AF015167.1, AL079295.1, U18396.1, U67801.1, AL096841.6, AC024163.2, X55927.1, AL031680.20, AL354668.13, U67231.1, AP001666.1, AF302689.1, X55923.1, AC005701.1, AC034145.5, AF015153.1, AJ229041.1, U67211.1, Z94721.1, AC007043.3, AC008474.7, AL355922.4, Z49816.1, AL035455.30, AC022211.5, AC002465.1, AL138976.5, AL160471.5, AL031729.16, AF127577.2, AC010748.5, AL021707.2, AC004987.2, AL031054.1, AC006367.3, AC005919.1, AC008269.4, AL136969.7, AF015151.1, AL022318.2, AC022404.7, AL355384.6, AC005052.2, AL391834.8, AC005694.3, AP001724.1, AC026165.4, AC007132.3, AL158218.11, AC002430.1, AL161756.6, AL049868.20, AL121983.13, X54177.1, AC055731.22, AC010729.8, AC011224.8, AP002851.2, AC007384.3, AC005527.3, AL121825.19, AC011755.7, AC062033.2, AL031311.1, AF015160.1, AL109965.34, AC022311.5, AC006449.19, U12580.1, U18390.1, AL109759.4, AL080250.11, AC010530.7, AC020915.6, AL157902.6, X88791.1, Z95400.1, U12584.1, AL359813.23, AL365295.4, AL023876.2, AL078594.36, AF215937.1, AP000038.1, AP000106.1, AL031286.1, AL590762.1, AC007514.5, AF109907.1, AP000365.1, AC006312.8, AL008582.11, AP000744.4, AL096701.14, AC005076.2, AL445259.10, AF168787.1, AP001705.1, AC006337.4, AC084882.2, M96868.1, AL513008.14, AC007685.2, AC006989.3, AC004617.2, AC004808.1, X53550.1, AC006511.5, AL1356785.18, AC007488.15, AL137858.4, AC023137.5, Z98046.1, AC004957.1, AL035681.13, AC034242.5, AL023284.1, AC009403.5, AL021391.2, AF015147.1, AP000556.2, AC004686.1, AC004485.1, Z74696.1, AP003697.1, M16110.1, AC004216.1, AL133551.13, AL132641.3, AP001224.3, U69730.1, AL159997.14, AC008506.7, AC006012.2, AL450224.1, U67233.1, AP000548.1, AL354857.13, AC020893.5, AL121594.6, AP001216.3, </p>
--	--	--	--	--

						AL365214.16, AC078842.2, AC006005.1, AC077690.1, AC005080.2, AC006251.3, AL021453.1, AP000626.5, AC087312.8, AL445307.8, AL161670.4, S43650.1, AC004638.1, AL109847.5, AC005376.1, AC004760.1, AL589947.3, Z95124.1, AJ003147.1, AC022202.12, AL590964.8, AC008755. 6.
HCUHK65	100	651313	1 - 353	15 - 367		AI161343, AL520380, BG111970, W84487, AA868067, AA931374, AL2171350, AI080159, AA970366, AI221950, Z39489, F02802, AA213383, AI205879, N92722, T08346, R42398, AI743040, R37459, C02421, F04701, N92721, AI861833, W84564, BF062378, BG032378, AI190488, AL442092.1, AC004142.1, AB060967. 1.
HCUIM65	101	550208	1 - 861	15 - 875		BE781101, BE540200, AI972511, BE300952, AA464837, BG150212, AI681901, AW172458, AA099207, AW205564, AW408650, AW205714, AA450308, AA636047, AI656442, BF437116, BE466112, AW575656, AW962721, AW206882, AA099221, AI620473, AA369585, AW469939, AW136836, BE547752, AI638262, BF059133, AA236642, BE551958, AW086133, AI917742, AI623315, AC005391.1, AL445584. 16.
HCWEB58	102	135241 6	1 - 1269	15 - 1283		
HCWGU37	103	104232 5	1 - 2763	15 - 2777		AV762098, AV718260, BG249643, BF677892, AI334443, AW965008, AV764228, BF697673, AI270117, AV710066, AI284640, AW072923, AV733830, AV713243, AL046409, BE646496, BF680074, AL138455, AW303196, BF241967, AW301350, AL037683, AL120483, AV760466, AV760599, AA055169, AA490183, AW406447, AV710387, AW769399, AA587604, BF681576, AI133262, AL046205, AI445582, AI281903, AW008212, AV764578, BF725504, AA244357, AI567674, AA521323, BF680041, AA813902, AV763354, AL041690, AV762645, AV763714, AV760042, AF330238, AA521399, AA719292, AV762959, AV759505, AV759204, AV760777, AW274349, AA838140, AA857486, BG167743, AV760937, AI307201, AI538852, AI696962, AA126035, BF676981, BE967369, BG109996, BF337291, AV762139, AL044940, AI963720, AV756693, BF679256, AV761286, AW472872, AV764530, AI672135, AV759172, AA501809, AV725431, AV761925, AW373587, AI076616, AW979060, AV762397, AI654588, AV728425, AW502305, AV760039, AV762050, AI431303, AV763670, AV762064, AV729809, AW518220, BE160727, BF668217, AI064864, BF679274, AA720702, AV763629, AA640772, AA526787, BE779948, BF311000, AW502100, AW963497, AA581903, AI204309, AF074677, AI679782, AV758946, AI917156, AV740801, BF684828, AW167799, AI133164, BG177715, AL042853, AI754955, AV735495, BF984050, AV764241, AV763385, AV764329, AI431232, AW950797, AW021583, AA569167, AA610491, AV682003, BF347791, AA488746, AV757607, AV725423, AW193265, AV710770, BF991286, AI471543, AI679294, AV763540, AA491814, AI538433, AU149045, AI623720, AW265385, AV759267, AU145239, AW473541, AW327868, BE049095, BF797630, AV763449, AV742057, AA837084, BF347740, AV761489, AI732865, BE146711, AI281881, BF965007, AI801482, BG236735, AW410400, AV760378, AL048626, AU155359, BE049139, BF673914, AI144055, AV760774, BF681427, AV761362, BF130605, N23097, AA470969,

AW513569, AW193432, AW600804, AW419262, AI049940, AA171513, AI061313, AV728612, AW510513, AV762535, AW088202, AA349366, AI305766, AI368745, BE895987, AW513556, AL119691, AI625244, AI679871, AL138265, BF475381, AV681599, BE253048, AW467362, AA631507, AV763971, BF806176, AW630298, BE872393, AI26051, AI282832, AI345654, AV764490, BF761328, AI500454, AW972312, AW272925, AI457397, AW964365, BF674369, AW501386, AA167659, AW964364, AV764526, BF674823, AV762009, AI350211, AW411430, AC004797.1, AL512430.14, AC068712.6, AC017033.5, AL512307.12, AL354873.19, AC000004.1, AL008718.23, Z97054.1, AC021016.4, AL162426.20, AF123462.1, AC007620.30, AC004848.1, AL121751.12, AP000952.2, AC011464.5, AC003043.1, AP000159.1, AC006449.19, AP003357.2, AC007425.16, AF107258.1, AC004878.2, AP001670.1, AC007782.20, AL031228.1, AC018635.6, AC004867.5, AL049758.11, AC006013.3, AL359236.4, AC004638.1, AC009144.5, AL121655.1, AP001710.1, AL121753.30, AC005291.1, AC006989.3, AC007034.4, AC005969.4, AC004971.3, AL109965.34, AC006211.1, AL138885.21, AC021506.5, AL157838.24, AC025540.7, AL136981.22, AC009412.6, AC090527.3, AC002347.1, AP001688.1, AL137141.10, AC016526.6, AP001730.1, AL356915.19, AP001716.1, AL035458.35, AL449305.4, AC0073138.3, AL163218.2, AP001707.1, AL033379.2, AL136126.34, AL157823.9, AC005081.3, AC004029.1, AL133232.15, AL096775.10, AC005486.2, AP003475.2, AC084881.19, AC018494.6, AC009137.6, AC005019.1, AL118520.26, AC018618.5, AC008534.5, AC011816.17, AC018808.4, AL022163.1, AL139396.17, AL139113.21, AC002126.1, AC005154.1, AC005412.6, AC008101.15, AP003477.2, AL445984.6, AC020908.6, AC005913.2, AL445675.9, AL121868.11, AF053356.1, AC007384.3, AC004263.1, AC020906.6, AC008891.7, AC090939.1, AL096700.14, AC007374.6, AC006312.8, AL021453.1, AC025962.5, AP003697.1, AC008569.6, AC002558.1, AL022316.2, AP001691.1, AC005295.1, AC018809.4, AL356244.12, AC002430.1, AF003627.2, AC022013.3, AC011462.4, AC008745.6, AP001697.1, AC018507.3, AL122008.28, AL136969.7, AL049762.20, AL109654.22, AL137881.12, AL163973.1, AP001706.1, AL122021.3, AL139021.6, AC026475.6, AC011453.4, AL355543.13, AP000893.5, AL121578.1, AL161670.4, AL034420.16, AL589723.7, AC019233.7, AL136179.15, AC000353.27, AC074391.5, AC069262.24, AP001720.1, AL355833.4, AC018695.6, AC004477.1, AL163032.3, AC083871.2, AC079906.15, AC026172.3, AC005377.2, AC005620.1, AC010650.8, AL050307.13, AP001711.1, AC004859.2, AC022007.3, AL023807.6, AL354735.14, AP001760.1, AC007541.9, AC007878.2, AP000215.1, AC000052.16, AC006028.3, AL133373.5, AL109804.41, AC005808.1, AC008267.6, AC005080.2, AP001727.1, AC004933.1, AC008280.4, AC004841.2, AL157837.10, AC011247.10, AC007405.6, AC007193.1, AC004914.1, AC024563.4, AC008897.7, AF227510.1, AC008481.7, AL135927.14, AC007227.3, AC016598.5, AP001533.4, AC005488.2, AP002852.3, AC025159.28, AC008812.7, AC008760.6, AC006040.3, AL031737.2, AC004987.2, AL163248.2, AC017082.4, AL139331.19, AL109614.28, AP001709.1, AC002375.1, AC012502.3, AC005052.2, AC008543.7, AL359091.10, AC009503.3, AF111167.2, AL109984.14, AC007011.1, AL049780.4, AF190465.1, AL357034.18, AC005516.1, Z82206.1, AP000257.1, AL035089.21, AL035668.15,					
---	--	--	--	--	--

					AC006480.3, AL031429.11, AC005146.1, AC016830.5, AC020931.5, AC011489.6, AL049776.3, AC002487.1, AC002369.1, AC009516.19, AC005962.1, AC005523.1, AL133282.15, AL121658.2, AC009333.10, AC019181.4, AC010378.6, AP000783.4, AL132712.4, AL158830.17, AL391987.15, AL033383.26, AL137128.4, AL158052.10, AL590682.9, AP001718.1, AL1354716.9, AL096840.25, AC006006.2, AL121897.32, AC022384.4, AC006965.3, AL354864.16.
HCWK15	104	553621	1 - 696	15 - 710	<p>AW504485, AI380617, AW805539, AV758903, AL079734, AA916430, AW819125, AV762982, AI625604, AI792575, AW084445, AW975210, BE138594, AW069227, AW023111, AV764259, AI792521, BE501593, AW021583, AI890324, BF725844, AW438542, BE138509, AV763026, AV763058, AA904275, AI521525, AA665330, BE077105, AA501461, AW969743, AW327591, AA535216, R94326, BF589824, AA574442, AW338179, AW271904, AI279417, AA651639, AI859946, AA524616, AW020150, AA833896, AV761862, AL042373, BE968744, AW004884, BF528591, AV760019, AA610509, AU131037, BF804385, AA833875, BF725761, AI053688, AI923052, AV761714, AI821714, AI792133, AI791913, AA013168, T74524, AI355246, AW474168, AI284543, BF724838, AI912401, AW068596, AV762633, AI564209, AW975626, AI620992, AI821785, AA483606, AV756220, AV754716, AA533176, BG236628, AI491765, H05940, BE139139, AA504906, AI250552, AA019973, BE049032, AA223174, AI798449, AA570740, BF965775, AL022238.1, AC006329.5, AL359402.3, Z98304.1, AC006948.4, Z84487.2, AC006312.8, AC026749.5, AC010627.5, AC008623.4, AC016656.5, AC016652.5, AC005531.1, AC004675.1, AC006057.5, AL033383.26, AL132768.15, AF088219.1, AC004849.1, AL031904.1, AC079177.21, AC007318.4, AL035659.22, AC074013.5, AC005829.1, AL035252.5, AL590762.1, AC005668.1, AC007216.2, U95742.1, AC005480.3, AF196969.1, AL158207.15, AC078846.2, AL121655.1, AC008754.8, AC011443.6, AC007191.1, AC008747.5, AL445217.3, AL161911.17, AC006515.7, AL034449.1, AJ010597.1, AL031659.9, AC008891.7, AC016543.6, AL109628.5, AC009509.7, AB038653.1, AJ400877.1, AF317635.1, AL160165.17, AC004106.1, AC004893.1, AL049776.3, AL121753.30, AC002553.1, AL132777.4, AC010530.7, AC005911.6, AL050349.27, AL158830.17, AP002815.3, AP001727.1, Z79996.2, AL035455.30, AL033529.25, AC087071.2, AC009501.3, AC007570.23, AL137229.4, AC004084.1, AC005746.1, AF314058.1, AP001717.1, AL365364.19, AC010463.6, AC004906.3, AC008044.4, AC022415.5, AC008848.7, AB001523.1, AC005387.1, AC007565.1, AC020904.6, AC091529.1, AC002316.1, AF283320.1, AL133163.2, AC026172.3, AL356113.8, AC005079.6, AL163210.2, AP001725.1, AF348209.1, AC002369.1, AC008784.6, AL161937.13, AC011481.4, AL354735.14, AC008622.5, AF111167.2, AC011890.4, AC006449.19, AL352978.6, L78833.1, AL096761.1, AC004593.1, AL096701.14, AL136300.22, AL121949.13, AL031432.1, AP001561.4, AC013355.7, AC090958.1, AL133153.3, AC005837.1, L47234.1, AC004448.2, AP000500.1, AC005840.2, Z95114.19, AJ011930.1, AL359091.10, AL163300.2, AC003101.1, AL139415.10, AC011485.6, AC007738.2, AC005225.2, AC002477.1, AC012306.11, AL035413.19, AC006146.2, AL109798.19, AL512347.14, AL109925.11, AC008762.6, AL355543.13, AC022468.5, AL162252.17, AP001753.1, AL121905.23, AC005283.2, Z98742.5, AL137145.13, AC006126.1, AL136039.4,</p>

					AC003070.1, Z82244.1, AP000088.1, AC005792.1, AC025540.7, AC010583.5, AC090949.1, AL158196.24, AC011495.6, AL354932.26, AC024028.10, AL031846.2, AC087590.1, AC026776.4, AC005726.1, AL159156.15, AC006064.9, AL136296.3, AC011472.7, AF196779.1, AC018663.3, AC009269.6, AL138720.19, AC007685.2, AC011479.6, AL139082.18, AL132712.4, AL079341.19, AC006274.1, AL136526.27, AL117692.5, AC006028.3, AL139041.17, AC004019.20, AC020550.4, AC009623.6, AC005529.7, AC003681.1, AC004882.2, AC004840.3, AC022150.5, AC018673.4, AL161799.19, AL359704.9, AL138680.15, AC011450.4, AC005578.1, AL136303.15, AL133465.30, Y14768.1, AF165926.2, AC011461.4, AC000052.16, AC025165.27, AC002310.1, AP000343.1, AF129756.1, AC007021.3, AL133245.2, AC005089.2, AC007597.3, AL022163.1, AF168787.1, AC074295.7, AP000252.1, AP000505.1, AL031587.3, AF243527.1, AL138836.15, AL353807.18, AL139232.13, AP000065.1, AC016894.7, AC018636.4, AC083884.6, AL139317.5, AL021546.1, AL136179.15, Z99716.4, AL049643.12, AL022336.1, AC008372.6, AP001169.1, AC018696.4, AC007263.4, AP001747.1, AC007679.4, AC006455.2, AL133448.4, AC009412.6, AC004491.1, AC073897.6, AC007055.3, AC004655.1, AP000215.1, AC004998.2, AC002350.1, AC012309.7.
HCWLD74	105	628256	1 - 1526	15 - 1540	
HCWUM50	106	639037	1 - 1414	15 - 1428	AW967979, AA937109, AA465498, AA465250, AW967765, AA262829, AA743297, H93605, AA325051, AW450216, H93604, AW206258, AU118507, BF513214, AW968591, BE934985, AA465142, AA309767, BE934984, AA204640, BE702699, BF795992, BG116852, AA765520, BF229206, BE838848, BE838830, AW499814, BE838839, BE163480, AU118047, AL158207.15, AF265550.1, AK000975.1, AB011126.1, AK001616.1, AK023681.1.
HCYBG92	107	598019	1 - 3047	15 - 3061	BG258518, AI637633, AI948573, AW001026, BF194917, BE552379, AA614057, AI694037, AI697799, BF060693, AA978366, BE467885, AI948579, AI637607, AA614050, AW237074, AI656925, AW515719, N78018, AA398561, AI655689, AI681905, AI478149, BE549746, BE467846, H94848, AW235884, R71114, AW167543, AA393165, AW293106, AA621018, T79170, AI300825, AA628874, AA705305, T79253, N78013, AI130016, AI094422, H73384, AA682445, AA305338, W35200, BE464472, AW002908, AW205359, AI560194, H94906, AV726948, AW340784, AV725907, AV704971, R94883, AV704064, AV704660, AV726781, AV706814, AV706025, AV703342, AV727576, AV725152, AV707628, AV702984, AV726559, AV729411, AV706527, AV729593, AV706746, AV706910, R71180, AV652156, AV702071, AV706410, AA628873, H61723, AV729408, AV704245, AV703591, AV705525, AV652547, AV704304, H61929, AV705678, AV708423, AV707948, AV705174, AV704974, AV704378, AW271500, AV658362, AV703388, AV709514, AV729017, AI873386, AV702222, AV753858, AV707451, AV706290, AV659189, AV706395, AV703862, AV707769, AV705020, AV707510, AV706596, AV709356, AV725845, AV661744, AV725181, AV706357, AV705532, AV702637, AV726319, AV729129, AV705443, AV725431, AV708347, AV650367, AV706742, AV728884, AV703232, AV645768, AV702958, AV703453, AV706851, AV653845, AV712021, AV701626, AV705662, AV707882, AV727103, AV727347, AV704520, AV728715, AV709935, AV725369, AV682390, AV701985, AV726480, AV706047,

					<p>AV706925, AV726754, AV726392, AV725043, AV706891, AV651503, AV702187, AV714286, AV706724, AV707783, AV701657, AV702869, AV727583, AV727929, AV701728, AV701851, AV701611, AV728471, AV703417, AV702798, AV701875, AV703542, AV707798, AV706220, AV707117, AV728459, AV704924, AV708720, AV727355, AV704279, AV707639, AV724987, AV705234, AV705263, AV705282, AV702671, AV707589, AV729220, AV729357, AV725387, AV702673, AV701783, AV706104, AV701596, AV759156, AV693117, AV692972, AV705555, AV725956, AV728185, AV733476, AV702409, AV707685, AV702402, AV726532, AV706453, AV707686, AV702792, AV708809, BF590406, AV704605, AV726183, AV709692, AV705343, AV701538, AV725927, AV701496, AV707690, AV727189, AV725514, AV706318, AV703214, AV725281, AV729983, AV745940, AV726703, AV706394, AV703367, AV702537, AV707658, AV706889, AV725154, AV728289, AV707088, AV647654, AV702954, AV701499, AV703505, AV702787, AV706532, AV709932, AV702383, AV705504, AV701560, AV740894, AV704116, AV704611, AV703125, AV705273, AV704879, AV656240, AV706234, AV712350, AV725989, AV702498, AV727932, AV707171, AV705280, AV728872, AK000378.1, AC007182.3, AK027804.1, AJ244005.1, AJ244004.1, AJ244003.1, D78345.1, U94592.1, AJ244007.1, D50010.1, D13316.1, AB025273.1, AF144029.1, AJ276256.1, AJ276254.1, Z30183.1, Y14219.1, AJ244006.1, X82834.1, AF144028.1, AB005666.1, AJ276255.1, D88547.1, U45328.1, R17907, R17999, R71181, H16983, H58191, H73385, N58423, N58428, W23756.</p> <p>BE294597, AA749068, AI284640, AL046409, BF677892, AW193265, AI431303, AL138265, AI334443, AV760777, AI613280, AV763354, AW419262, BF668217, AV760937, AI963720, AV740801, AI281881, AF330238, AI345654, AW502975, AV710066, AI270117, BG249643, AI305766, BF311000, BG109996, AV762098, AV734666, AW965008, AW576391, BF337291, AV762050, AV761362, AA610491, AW410400, AW833862, AL045053, AI345518, AL138455, AW327868, AV728425, AI350211, AW270270, BE047069, BF697673, AV735370, AW500125, AV764307, AV761489, AV762111, AV764578, AV762395, AA631507, AV725423, AV763255, AV763971, BF679304, BG222267, AA526787, AL044940, F36273, AA469451, AI610159, AL041690, AV759274, AV761786, AL119691, AI305547, AA490183, AI754658, AV762139, AL037683, AI821271, BF241967, BG236735, AV757607, AI568678, BE350475, AV764241, AA491814, AW872676, AI708009, AA720702, AW472872, BG059568, AI053672, AW963497, AI133164, BF827410, AL042420, AW439558, AI289067, AW969629, AW974109, BG171096, AW438643, AI355206, BF681576, AL046205, AW276827, AV760774, AV762064, AV756693, AV652936, AL120687, BF130107, AI149478, AW975425, AV763633, BE049139, AA468131, AI471481, AV760042, AI688846, AV762959, BF854876, AV759505, AW269488, AV764398, AI537506, AV762397, AV763670, AV658688, BF940837, AV763195, BE154617, AW088202, AW407578, AI679782, AW630298, AV762535, BE872393, AI619997, AI341664, AI345681, AI345675, AI801482, AV733830, AF074677, AW406162, AW103758, AV763540, AV762154, AW193432, BF475381, BF964720, AA623002, AI375710, AV682003, AV759382, AV757425, AW083402, AI633025,</p>
HDABR72	108	130151 7	1 - 1677	15 - 1691	

					<p> AW972769, AW029038, AW511743, BE042649, A1053790, AV762009, A1919265, BG104686, AW021207, BF724372, A1061334, AA984708, AV760057, AU151000, AU145314, BF939954, A1499938, AW406755, A1085719, AV763122, BF851403, BE049095, AW148792, AV759580, BE206443, A1799642, AW023672, AV761843, AW162049, A1962050, A1929531, BF680805, AA483223, AW088846, A1281697, AW969698, AW969694, A1732865, BF679274, BF984160, BG056088, AV761403, AW872575, AV762826, AL119649, AV761106, A1446601, A1249997, A1434695, BF793766, AV761188, AW979031, BC003642.1, AC018795.9, AC005280.3, D83989.1, AC022148.5, AF077058.1, AC009161.12, AC002470.17, AC083868.2, AF015151.1, AL022724.2, Z93023.1, AP001666.1, AC007308.13, U18391.1, U18392.1, X55925.1, AC084882.2, AL590964.8, AF015149.1, AF015156.1, U57005.1, U57006.1, U18394.1, AC009086.5, X53550.1, AL031123.14, AC073655.26, AC012077.4, U57008.1, AC004862.1, AC009475.4, AC008039.1, X55926.1, U57009.1, AC006211.1, U18395.1, AF015157.1, AP000901.5, U18393.1, U57004.1, AL137839.6, AF015147.1, AL031121.5, AC009952.4, AL049759.10, AP001725.1, AC007367.3, U57007.1, X54180.1, AC008760.6, AP000557.2, X54181.1, X54178.1, AC021752.5, X75335.1, AC055740.17, U18399.1, U18387.1, AL109965.34, M37551.1, AC005231.2, AL590762.1, X55931.1, X54179.1, AL109935.39, AL031542.1, AL021393.1, X54175.1, AB045361.1, X55924.1, AP001172.1, AC034242.5, AC016830.5, AC011485.6, U67801.1, AF215937.1, AC005257.1, U02531.1, AL161756.6, X54176.1, AL049588.11, AF196779.1, AL096841.6, AL359513.12, AC011480.3, U18398.1, AL121581.41, AC008101.15, AC018644.6, AP001972.4, AC020740.5, AC005911.6, AL163282.2, AC005484.2, U18396.1, AC007957.36, AF015148.1, AL139113.21, AC034145.5, AC069255.18, AC005234.1, AL023803.3, X55923.1, AF109907.1, AL049835.3, AC007324.55, AB020863.1, AC005011.2, AC004098.1, AC007318.4, AC008079.23, AL512666.6, U82671.3, AC005047.3, AL034420.16, AL050328.24, AC004813.2, AL451103.7, AC073651.23, AF042090.1, U02532.1, AC073581.23, AL031005.1, U18390.1, AL008725.1, AC000075.2, AL121897.32, AC009269.6, AP002534.1, AL354928.9, AC022415.5, AP000161.1, AC035150.1, Z82901.1, X55922.1, AC008622.5, AL354915.5, AL445189.7, X76070.1, AL035696.14, AL122035.6, AC018633.2, AL359751.12, AC034186.4, AL137229.4, AC004971.3, AL021918.1, AL121970.17, AC006479.2, AL159155.8, AL049691.18, AC004263.1, AC006329.5, AC074191.3, AL158218.11, U18400.1, AL132987.4, AC090841.1, AL357515.26, AL356020.3, AC009506.5, AC005785.1, AL590709.5, AC002365.1, AL049647.7, AC004662.1, AL122013.5, AC005664.2, AC073347.3, AP001731.1, AC008119.6, U67221.1, AL158141.14, AL021154.1, AP001688.1, Z99129.1, AL357518.15, AL359637.14, AL132642.4, AC012306.11, X55927.1, AL133332.12, AC004257.1, AC005215.1, Z83840.7, AL590076.3, AC005632.2, AC005918.12, AL035450.1, AC006270.1, AP000356.2, X55932.1, AL158159.14, AL109825.23, AC009996.7, AL031661.28, AL512430.14, AK024206.1, AL118501.22, AP001434.1, AC073145.8, AL139327.18, AP000348.1, AC008744.6, Z95114.19, AE006463.1, AL359085.14, AC027319.5, Z74739.1, AL356801.5, X54177.1, AC072052.6, AC004858.2, AF196971.1, AL392110.12, AC021382.6, AC023669.8, AP000020.2, AC003006.1, AC007879.3, AL096707.12, AF085913.1, </p>

HDHEB60	109	499233	1 - 1407	15 - 1421	<p>AL132874.30, AL445212.9, AL080242.11, AL035446.4, AL121989.12, L47228.1, AL031681.16, AL161666.4, AC017079.5, AC006433.18, AC009131.6, AC008555.5, AF015150.1, AC010422.7, AC004028.1, AL050341.18, AC087239.18, AC006327.3, AC005341.12, AC019205.4, AC005755.1, AC009470.4, AF015153.1, AC011484.4, AL022324. 1.</p> <p>AL524364, AL527936, BE729676, BE734215, BG034535, BE879791, BG030700, BE782405, BG031399, BF219970, AW961043, AW245732, BE540977, BF125197, BE264862, BE264047, AA523441, BF348672, BF125434, AW250195, AW860381, AW246993, AI654715, AW168308, AI949310, AW068175, BE259690, AI393119, AW938768, BE279977, AW938746, BE857719, AW190234, AI871661, AA494392, AW900867, AA338903, BG006350, AL527587, BF091980, AA602247, BF804618, AW364083, AA357684, AW178944, R40832, BF374357, AW662637, AL524365, R42008, C20713, BF360339, BF915537, AW088134, BG035330, AI800433, AI559667, AI800453, AI536557, BE907440, AI689463, AI922091, AW151132, BF529043, AI285417, AI804505, AI952433, BF914091, AW118557, AI926593, AW151136, AI498579, AI539771, BE897632, AI432644, BG254284, BF304748, AI537677, AI494201, BF812963, AI500659, BG180468, BE883591, AI868831, AI866465, AI815232, AI866691, AI801325, BF812438, AI500523, AI538850, AW089221, BE968552, BE885490, AI887775, AI582932, AI590043, AI284517, AI923989, AI872423, AW172981, AI500706, AI445237, AI491776, AI289791, AW151138, BF811804, AI521560, AI889189, AI500662, AI582912, AW172723, AI284509, AI539800, AI889168, AI440263, AI538885, AI927233, AI866573, AI633493, AI434256, AI866469, AI434242, AI805769, AI888661, AI284513, AI500714, AI888118, AI277008, AI285439, AI436429, AI859991, BE964045, AI355779, AI623736, AI889147, AI371228, AI581033, AI431307, AI440252, AI491710, AI440238, AL047422, AI866786, AI567971, AI610557, AI860003, AI431316, AI242736, AI539260, AI828574, AI887499, AW151979, AI038575, AI539781, AI702065, AI539707, AI885949, AI285419, AW089557, AI559957, AI521571, AI469775, AI866581, AL047398, AW074057, AI815150, AI567953, AI446495, BE906230, AI867068, AI225248, AI698352, AI815239, AI371229, AI921420, AI624279, BF913616, BG252929, AI701890, AI687614, AA464646, BF038804, AI919345, AW858243, AI282249, AI962040, AI829330, AW078839, BE895765, AI554821, AI561170, BE764656, AI636811, AI515375, AI500146, AL042365, AW059765, AI263331, AI610756, AI440260, AI690946, BF814072, AI890907, BF811802, AW129310, AI866458, AI431238, BF815930, AI648567, BF925348, AL514069, BE540578, AA830821, AI924051, AI433157, BE964497, AI273179, BE621206, BG108452, AI371251, AI866510, AI499986, BE968711, AW151974, AW073697, AI866461, AI923046, BF339011, AI049859, BF752892, AI436458, BF526393, AI379711, AI918408, AI334445, AW169643, AL048403, AI915201, AA878808, BF764538, AI349814, AI953880, AI702902, AI800171, BE881675, AI819663, AI432656, AF118240.1, AB016531.1, BC000467.1, BC004356.1, BC000632.1, AK025906.1, BC004937.1, AK027081.1, BC007634.1, AL133070.1, X79204.1, AK000247.1, BC004908.1, AL080162.1, AL136781.1, AF017790.1, Z22828.1, U92992.1, BC002356.1, BC008382.1, BC001093.1, AL080127.1, AL136748.1, BC008195.1, AB048910.1, BC000713.1, AK024550.1, BC008818.1, BC001470.1, AK027116.1, AL133084.1, BC008488.1, AB063077.1, AL137275.1,</p>
---------	-----	--------	----------	-----------	--

					AF056191.1, AK026086.1, BC004370.1, AB047609.1, BC003105.1, BC006164.1, BC002485.1, AL122098.1, AF111847.1, BC008893.1, M92439.1, AP001343.1, AL512454.6, BC002839.1, AK026038.1, AJ004832.1, X72889.1, BC002491.1, AK026865.1, AK026021.1, AK025084.1, AK025958.1, BC002607.1, AL136825.1, AL133049.1, BC001790.1, BC000785.1, AB060905.1, AL161953.1, AL136765.1, S77771.1, BC004926.1, AL137429.1, BC006207.1, AL389978.1, BC006508.1, AF067420.1, AK026642.1, AK026590.1, BC007657.1, AF260566.1, AB063087.1, BC002844.1, AF369701.1, BC004181.1, AL117432.1, BC000051.1, BC000386.1, BC007852.1, AK026749.1, AF151109.1, BC005805.1, AK026164.1, AB049629.1, AK025092.1, BC008717.1, AK026627.1, AL161802.15, AL353745.7, BC008365.1, D83989.1, U80742.1, AK026648.1, BC007207.1, BC002495.1, BC009272.1, AL136763.1, AL137556.1, AL136540.1, BC002777.1, AL080154.1, AK026532.1, BC009284.1, AC004690.1, AK026389.1, AF353396.1, AF022813.1, BC001328.1, BC002816.1, AL049423.1, AL049314.1, AB060837.1, AL512705.1, BC002524.1, AL137536.1, AK025541.1, AF036268.1, AL080126.1, AL389935.1, AK026631.1, AC044797.5, AK024622.1, BC009212.1, BC005007.1, S61953.1, AB019565.1, Y10080.1, AK025391.1, AK000432.1, AK026522.1, BC004265.1, AK026541.1, AK027161.1, AB047941.1, AL157464.1, AK026793.1, AB060929.1, BC008785.1, AK025431.1, AK026603.1, AB060839.1, AK027142.1, AL137656.1, AL133565.1, AL137665.1, AJ406932.1, AC003032.1, AC005057.2, AC010137.3, AL353802.14, AC005968.1, AL157360.8, AL162713.19, AL359997.8, AC007298.17, AL133629.1, BC006332.1, BC003687.1, AF030165.1, AL122100.1, AL133053.1, BC002476.1, BC000066.1, BC003122.1, BC006133.1, Y00093.1, AF002985.1, AB055805.1, AL122049.1, BC009395.1, BC002519.1, D44497.1, BC000377.1, BC001963.1, BC001191.1, AB060226.1, AL137557.1, AK000655.1, AF218023.1, AL162062.1, AK027188.1, AF188698.1, BC006412.1, AF218034.1, BC006465.1, S76508.1, AK027868.1, AC021020.3, AL080158.1, BC000317.1, BC005854.1, BC008025.1, U67211.1, AL050138.1, X99226.1, U77594.1, BC001082.1, AL110159.1, AF169154.1, AF271350.1, AL080060.1, AL136884.1, AK027114.1, BC002647.1, AB050418.1, AK025209.1, AB049758.1, BC004119.1, AL157431.1, AL137660.1, BC008078.1, AB056768.1, AL080129.1, AL110222.1, AL136882.1, AF205073.1, U51587.1, AL135933.11, AL157878.11, X66417.1, AL035458.35, BC006487.1, BC006147.1, BC003651.1, AF358829.1, BC007280.1, AK000445.1, AK026571.1, AL512746.1, BC002386.1, BC006198.1, S69510.1, AF112208.1, AF124728.1, AL162085.1, AF321617.1, AL137662.1, AL137480.1, Z94277.1, AC006222.1, AC010088.3, BC001427.1, AK026591.1, BC004960.1, AK000450.1.
HDHIA94	110	765171	1 - 1475	15 - 1489	T75217, R21117, F12855, AA825244, T06656, AA393627, AA400803, BF087642, AF169257.2, AL121761.5, AL121830.25.
HDHMA72	111	547772	1 - 4449	15 - 4463	AF107454, AU131474, AL527406, AL527364, AL525109, AU125391, BF969516, AW207619, BE908862, BF968132, BG260993, BE876744, BF439992, BF667287, AW340566, AA534290, BF130397, AA282393, AI635585, BE857014, AW953405, BF132394, AU145369, AA776464, AW139543, AI880884, BE874401, H24404, AI564770, BE618887, AA205320, AA307511, AI697902,

					AA947281, BF980901, BE972350, A1625227, A1094857, BE890171, A1942231, BF669953, A1767771, BE873512, BF576213, AA443876, BF510801, A1138757, N59387, A1206904, BF060757, BF038635, BE218501, H23497, A1129939, A1359282, BF770081, BF680672, T75075, AW169922, BF680887, AA400655, H18538, AW513886, AW821652, AW438395, A1017751, BF698925, AA307337, BF665081, AW951664, H23505, Z43207, AA309597, BF131428, AA476728, BF001173, BF666559, T77003, AU118919, A1827798, N28440, BF509910, AA485147, AA005130, BE245726, A1991609, F06371, AW751560, A1431939, F06352, AA662978, N77075, A1363369, A1206609, AV722188, BE858247, A1032106, A1363266, AA554317, A1560382, A1261716, BF932190, F13039, BE787193, A1040191, R40397, R80381, AW007847, R80487, T87366, AA024900, H14797, A1301618, AA206751, F07384, R02736, H68321, Z39279, A1023953, AW316878, A1675507, AA953932, W93286, AA970085, Z42220, A1928411, AA037301, F02661, W93287, T89999, F11062, A1587242, Z43926, A1249693, T78880, F02642, W32125, AA024899, T82820, T82305, W46783, R13009, Z45415, A1365308, BE184024, F12724, AA005415, F10631, R02735, W46782, N59001, Z45760, R83449, BF332782, T98853, W31631, N50637, Z39986, R38518, AW363028, A1081008, AA400700, BE618487, AA331899, AA296346, F01749, T99449, A1471180, BF332556, Z41409, H14798, BE790376, AA218742, AW812111, F03625, H18430, R13181, AW753043, A1673745, N54124, AA581647, AA485032, A1382497, BE932794, BF374955, BE161420, AA282051, BF879002, A1214731, N55845, AC005534.2, AK026940.1, AK021727.1, AF063592.1, AF348513.1, AC007075.3, AC007097. 4, BF222902, BE908203, AL049012, AV751505, BF589784, BF939631, AV752758, AW161772, BF984735, BE156564, A1963569, A1627938, AU145766, AA430167, AW885969, AW885971, AU144116, AW885970, AW150904, AA811288, AW148833, AA016001, AU146932, AA534493, BE246689, AW572295, BG260240, AU155669, A1580793, AU149721, BF791136, A1473859, AU157762, AU150899, AU119418, AU150032, AA552599, BE349918, A1762820, BF572303, AA630256, A1249503, BE348915, BG257768, A1289630, BF941915, A1093700, A1683179, BE767826, AA902142, BE243543, R50658, AA994326, Z43651, AW589235, A1796343, Z39714, BE246512, AU156488, BE246684, BF184442, T36201, R50558, D60811, BE247745, BE165921, A1796404, AW023060, A1560541, AA445981, Z45738, BE242535, BF693665, AV657085, F04619, BF692774, AU121025, AW960825, BF571603, AK025407.1, AK025829.1, AF205600.1, AF205601.1, AK022942.1.
HDLAC10	112	692299	1 - 1463	15 - 1477	BF669871, BF516590, BE891179, BF674702, AW968749, AA521300, BF034206, BF699497, BF218327, A1567665, A1749981, AA947871, AW968575, BE645523, AA812212, AA173660, AA669111, BE672554, AA279266, AA236768, A1139058, AW956031, BG178790, AA826451, A1281579, AA173659, AA737682, AA769373, AA156985, AA156679, A1263368, AA625733, AA491131, A1367576, AA236924, AA767739, A1281500, AA669931, AA279289, AA251939, AW304714, H78481, AW193270, AA136483, AA669955, R21922, H03284, T56019, R22571, AA223255, H03285, AA032147, AA032146, R25418, R28446, AA369930, A1289500, AA199609, AA095606.
HDLAO28	113	890457	1 - 1970	15 - 1984	

HDPBI32	114	135236 0	1 - 1499	15 - 1513	BF317233, BF348587, A1886854, BE262234, BF347922, A1564810, A1571772, BE260801, BF947408, AA620986, AW964855, BF348199, AL118922, A1948418, BF590647, AA682932, A1197966, W56893, BE832972, H38493, R88493, AW139827, AA984456, H49766, AA604007, AA324912, H38543, BF959580, A1816315, BF957744, H30751, H38473, A1565716, AW160990, A1027311, AA326240, BE383259, A1369823, R88620, BF928045, AA323285, AA326352, BF445694, AW904314, AW964663, BF957741, AW896684, AW896682, AW875497, BF758599, H51158, AW896689, AW904318, R89653, BE702414, R85211, AW888897, A1468058, BF206086, R88824, AW904306, R88628, H51120, AW896674, H41534, BF967275, AA622175, BF947811, AB023167.1, BC000051.1, AF190461.1, AB060204. 1.
HDPBQ71	115	116031 6	1 - 2298	15 - 2312	AL517702, AL535136, AL517701, BF966919, AV712906, BF310001, BE785105, BG023779, AW608043, AW959115, AW571652, BE546297, AV733133, BG164317, BF965688, AA910337, AW070547, AA630221, AA936329, A1077660, N66596, AA233825, BF769251, AW169158, BE896148, AW966447, A1092899, A1804163, BF966148, A1184325, A1400074, AW105140, A1038519, BE178803, A1243767, A1803580, AA449258, A1089365, A1969422, A1292304, AA971310, A1753091, AA233729, A1289889, A1335939, A1275621, AV748056, BF828492, AA451735, AA973548, H19041, AW129980, BF791539, AW472838, H65681, AA478196, AA666224, BF940460, A1002830, A1374721, A1264277, H29405, BE930289, AA446666, R52737, N99048, F06358, AA233772, H11875, H65682, BF725919, R64291, R59440, AA812450, Z44951, BF825554, BE711465, F07390, AA093749, A1080343, R24935, R64256, AA878276, BF248328, AA081567, AA081513, R20695, D11945, AA249453, AW630557, AA331924, F07956, A1672272, AA383930, AA385881, R63983, AA865796, A1078076, AW964475, AA448551, BF878091, BF091153, T97552, AA453075, BE937893, N98627, T53666, BF836787, R64175, R63901, AA319203, AA424168, BF791814, BG001790, H11513, BF376043, W30696, BE739183, BF086020, BF376012, AW189731, BF769066, AA383577, AW388471, AW388477, AW810765, AW388507, BF247577, AW810647, AW810736, AA092943, T97598, AW810677, AW627523, AW810964, A1261898, BF216270, BF555391, AW810687, A1221448, A1147974, A1611624, AA730133, A1377784, A1672529, BE551587, A1936568, BF115500, BE466653, AW303619, AW388498, BF382656, BF751597, A1962331, AW006254, A1351767, A1655026, AA884783, AL119457, AL119324, AL134524, AW971745, BE161864, AW149892, AL119396, AL119443, AW804686, AW392670, AK027596.1, BC006321.1, AF212247.1, AB062962.1, AC007533.2, AB026436. 1.
HDPCJ91	116	740748	1 - 6093	15 - 6107	AU119059, AW959367, BF792861, BF672087, BE439439, BE717153, BE770928, BE718895, AW971539, AL079949, BE770941, BF687684, BF132755, BF727151, BG009815, A1703121, A1066742, BE968461, BE717019, AW444843, W61007, A1949993, AW502324, A1150343, A1859085, AA393478, AW467411, BF515251, BF063545, BE717046, BE042969, BE673935, AU154204, AA292253, AA838717, AU145486, A1273190, AW512776, BF727150, A1084372, A1597583, A1457829, H99255, AW474793, BE327577, A1697937, A1167388, A1684736, W69563, W31042, AW753588, N98496, A1307397, AW613687, AW241267, BF198110, W60918, AA291214, AW316965,

					<p> BF090819, AA988341, AA908177, AA043254, AA651802, AA502341, BE536255, AA043612, BF431421, AI261626, BF214133, AA972952, AI334810, R80993, AI539739, D62886, AI611313, N28297, H99484, AI825223, AW938439, T65655, AI221607, AA169878, AA435697, AA262010, W69419, F11961, T34633, AI873428, AI457907, BF103809, T65584, AI695552, AA126467, AA641749, AW882312, N52582, BG149944, BE669976, D57676, AA169566, AA126647, F09610, AA46424, R78978, AA291524, D62733, T15751, AA169579, AA628830, AI796712, C18687, AA649257, AI431924, BE763704, AW374026, AV746759, AA091017, R13144, D79785, BF589508, R40624, R78884, AA250810, T20017, AA747613, BF725884, BF806370, AI733856, BF832074, AI635440, BF827469, AW504299, AI683131, AI291823, AI732789, AA236703, AI251034, AI355587, BE139139, AI336054, AI312790, AI250552, AW963463, BG222875, AI039809, AI223626, BF725844, AI284543, AI251284, AI251203, AW268329, AI254770, AA602906, AW673941, AV764259, AV647070, AI569086, AW303098, AA524800, AI249886, AI251241, AW474921, AV737641, BE042006, AI082510, AW971342, AW088049, AW068007, AK001067.1, AL161732.7, AC007688.15, AP001718.1, AL163281.2, AC009134.6, AC068724.7, AL117336.22, AL359382.23, AL121890.34, AC007540.3, AC008651.7, AL139405.11, AL031388.1, AC069255.18, AC006013.3, AC015977.9, AC010742.4, AC008891.7, AC025280.4, AC018764.6, AC005747.1, AL158052.10, AC011247.10, AC002072.1, AC007792.1, Z82203.1, AC004593.1, AC010616.5, AC068799.14, AL121656.2, AF020503.1, Z83822.1, AC005874.3, AF134471.1, AC073542.4, AC004752.1, AL161757.4, AL023575.1, AC006021.2, AC004638.1, AL161670.4, AL117377.18, AL050335.32, AL590636.12, AC002287.1, AL139187.19, AC068722.6, AL137061.12, AL163052.4, AL031132.2, AP001726.1, AL138885.21, AC007225.2, AC004953.1, AL137783.12, AL133373.5, AP000696.1, AP001712.1, AC019187.3, AL355365.10, AL132768.15, AL021395.16, AL512307.12, AP001706.1, AC010145.9, AL031273.1, AC017100.4, AP001694.1, AC020917.4, AL160411.25, AL139317.5, AC007639.5, AC090948.1, AC009333.10, AC015541.21, AC005538.2, Z82244.1, Z83845.14, AC016831.1, AC009505.3, AC004949.1, AC004965.2, AC005358.1, AC007388.3, AC007462.2, AC073581.23, AC008513.7, AC006483.3, AL356244.12, AC002368.1, AC026162.5, AC020741.4, AL096814.26, AL390755.5, AC005514.1, AC008474.7, AC007151.2, AC011359.5, AP002852.3, AC008066.4, AC004032.7, AL034405.16, AL442064.10, AC019046.4, AC006115.1, AP002851.2, AL138725.19, AL163209.2, AP001705.1, AC078878.20, AL138755.13, AC003950.1, AC011331.2, AC002367.1, AC022308.17, AL137780.10, AC069262.24, AL035415.22, AL035697.19, AP001729.1, AP001674.1, AL034549.19, AL356095.11, AF134726.1, AF130342.1, AL163249.2, AC004905.1, AC010149.8, AL390838.26, AL132709.5, AC074121.16, AC004891.1, AC008812.7, AC005274.1, AL133255.13, AC010271.6, AL157881.14, Z83826.12, AC034198.6, AL031687.17, AC006211.1, AL031228.1, AF001549.1, AL449106.15, AC025438.5, AC091118.2, AC063951.22, AC003012.1, AC004383.1, AL354680.14, AC004913.2, AC009263.6, AC002476.1, Z97353.3, AL445472.14, AC008738.6, AP000014.2, AC016673.5, AC005803.1, AC022336.12, AL158206.8, AC090517.2, AC006430.22, AC006345.4, AC011464.5, AC016716.6, AP002342.3, AC005703.2, AF168787.1, AP000563.1, </p>
--	--	--	--	--	--

					AP001688.1, AC004885.2, AC023668.4, AP001619.1, AL513366.11, AP000236.1, AC005939.1, AL137140.12, AL13355.12, AC012000.3, AC011443.6, AC008440.8, AL133387.8, AP001666.1, AF124730.2, AC012502.3, AC002365.1, AL133391.5, AC010543.8, AC006120.1, AL138997.18, AL133215.16, AB023048.1, AC005988.1, AC008507.8, AC022007.3, AL513131.1, AC079954.18, AL360078.16, AC018731.5, AC009044.3, AL138836.15, AL031846.2, Z73417.1, AC020901.8, AC073897.6, AL133551.13, AC010722.2, AC004673.1, AC006288.1, AC004491.1, AL136979.16, AL022334.1, AL031658.11, AL031776.7, AL445189.7, AC006239.5, AC006334.3, AL161421.11, AC002565.1, AC004382.1, AL359744.17, AC009518.7, AC022206.3, AC020906.6, AC018809.4, AC002331.1, AC079310.20, AC006327.3, AF243527.1, AL157818. 12.
HDPCO25	117	460682	1 - 753	15 - 767	AL193249, AL809829.
HDPCY37	118	837699	1 - 1918	15 - 1932	AL520370, AL529690, AL524481, AL520369, BE274454, AU141822, AU132723, BF314732, BE273689, BF026599, BE736766, BE791870, AI191318, BF689450, BE894541, BF690012, BF344946, BE880507, BG118146, BE410790, BE620315, BF969947, BE908116, BF183246, AW239293, BE260297, BF983977, BG121624, BE293262, BE907076, BE620852, BF868566, AI978812, BE049271, AA586860, BE272490, BF034205, AW474556, BE293363, AA805184, AI628509, AI582366, W73797, BG118530, W73745, AW083832, AI620297, BF434062, BE293362, AW967627, BG120472, AW628388, BF690389, AW513995, AI056600, AU154200, AW386876, BG166073, AI056739, BG253585, AI362766, AI494212, AI077551, AV711723, BF689649, AA935678, AI348675, AI358232, AA251769, AA968828, BE788883, BG252031, BF846596, AA659758, AI891139, BE964553, C06060, R67182, AA746268, AA506524, AA251926, AV736190, D81244, AA291462, H58621, AV739502, H58622, BF690549, BF183479, R38144, AI919497, AW193598, AI250032, AV740386, AA604444, BF359113, AI567397, AA905208, BF880393, BF745974, AA836253, R57498, AI525934, BG107079, AW663025, AW754473, BE718998, AA551675, AI364618, AI421662, BE938093, AW166086, R59996, AW151132, AI469754, AI554821, AL042593, AI654286, AL513693, AL513991, AI366900, AL515171, AW858522, AW151974, AW058275, BF970652, AL043152, AL513823, AI815239, AL513569, AV681993, AI538850, AL513713, AI801286, AL514919, BF033177, AL513729, BF304021, AI271716, AI815233, BG167830, AI440260, AI537677, AI494201, BF812963, AI804505, AI500659, AL513901, BE883591, AI866465, AI815232, AI801325, AI866691, AI500523, AI887775, AI582932, AI590043, AI923989, AI284517, AI872423, AI500706, AI491776, AI445237, AI289791, AI926593, AW151138, BF811804, AI889189, AI521560, AI285417, AI500662, AI623302, AI924051, AI539800, AI582912, AI284509, AW172723, AI538885, AI889168, AI440263, AI927233, AI866573, AI633493, AI434256, AI866469, AI434242, AI805769, AI888661, AI889191, AI500714, AI284513, AL514043, AI888118, AI285439, AI859991, AI436429, AI355779, AI623736, AI889147, AI581033, AI371228, AW194509, AI491710, BC001371.1, AK023931.1, AK001645.1, AY007088.1, AL135844.9, AF086313.1, AL356652.19, AL162002.1, AF155656.1, AF326206.1, AF265236.1, AL022315.1, AF084644.1, AF084645.1, AF159615.1, AL133084.1, AL133655.1, AL136805.1, AL133076.1, BC009395.1, AL136763.1, AL133047.1, AL133051.1, AL137561.1, AL133070.1,

HDPFB02	119	898208	1 - 3422	15 - 3436	<p>AL049423.1, AL136765.1, AL136781.1, AL122101.1, BC000234.1, AK025113.1, AL133053.1, AL136825.1, AL133049.1, AL133608.1, AL133607.1, AL117590.1, AL389983.1, AL133015.1, BC006091.1, AK000074.1, BC008075.1, AL133062.1, BC002396.1, AC007511.8, AF029750.1, AF002985.1, AK027096.1, BC006832.1, U73682.1, BC004416.1, BC002914.1, AL136849.1, BC001670.1.</p> <p>AL521596, AL521595, AL537690, AL537691, BG164147, BG260349, AW579704, BE787742, BF339441, BE147943, BG251728, AV704431, AW370664, BE148069, BF570111, BG027543, BG110212, BG030218, BE148079, BE874591, BG104640, BE706255, AW748481, BF984597, BF836429, BE539121, AW936159, BE147942, AW370670, AW937902, AW605173, AW370668, AW373397, AW370689, AW370665, AW937893, AW608803, AW937904, BE147980, AW608712, AW937888, AW937890, BF830716, AW379040, AW972283, AW972281, BE261966, BE048242, AW370674, BE148065, BF830631, AI084729, AW875470, AW370671, AI476782, BE620122, AW608713, BG170475, BG105828, AI675360, AI609081, AW370661, AA447617, AW972288, AI660011, AA448014, AA905682, AA194120, BF839878, BF345038, BF839879, AW580410, AI804395, AW875465, AI806699, BF195101, AI471976, BE148063, N51375, AW608829, BF840328, BE208162, AW390807, N30496, AA130156, AI298278, AI683457, N26284, BE019800, AI419725, AI568909, BF349972, AI683317, AW181901, BE312529, AA742660, AI520668, AW580406, AW083044, AW370662, AA057838, AI084876, N54338, AI806265, AA627446, AI587194, BE147996, AI928281, AA494093, AI928536, BF851601, AW608708, BF525869, AW338382, BE717999, BF105926, AA223133, N39463, AI364557, AI092740, AI675922, AA736412, AA687735, AA862124, AW378681, AW117328, BF998867, BE787979, BE882684, W52184, BE147993, AI094023, T69559, AA130120, T77734, H82591, AA295128, AI005397, AW753575, BE093237, T71295, AA227005, BF734572, AI372948, BF978965, H44297, T71435, AA478215, AI074980, AI088215, R11436, BE147828, W31197, AA934070, AI589134, AI421523, AW390780, T69625, AA903765, BF365447, BE147934, N21264, AW088052, BF741721, AA194011, AI831663, AW769622, BG236830, AW375570, AW665361, AA903763, AW771721, AW088044, AW339928, BF772279, AW663074, BE740207, BF355612, AI273022, AA935625, AA458984, BE763203, AI866457, AW875610, AI814594, AW383043, BF840329, T77735, BE147829, BF356464, AA478053, AA922987, BE906866, AI926333, AW875534, AI569429, AW192687, BF798292, BF859018, AW375699, BF762165, BF821121, AI818581, AW827211, AI475371, AI436456, AL121365, AW071349, AI538716, AV756122, AI687728, AL513907, BE047863, AV357455, BF883916, AL514627, AI433157, BF793644, BF970162, AI702406, AW268253, AI349772, AV732936, AI818683, BG257535, AI064830, AL047763, BG109270, BG031815, AI499393, AV711509, AL036146, BG179993, BE785905, AL047042, AL121270, BE881061, AL045500, BF812933, AV727776, BG151247, BE048071, AL513553, AI580190, BF054789, AL515041, AW827203, AI934036, AL513597, AI758437, AL360136.1, AF302102.1, AL360144.1, BC008417.1, BC008365.1, AL442082.1, AL512733.1, BC008488.1, AF090903.1, AL050393.1, AL133640.1, AF090900.1, AB055303.1, AL117457.1,</p>
---------	-----	--------	----------	-----------	---

					<p>AL136586.1, AB048953.1, AB056420.1, AL117460.1, AF090934.1, BC008387.1, AL110221.1, BC007021.1, AL049452.1, AF090943.1, S78214.1, AF104032.1, AF078844.1, AF090901.1, AJ242859.1, AL359601.1, AL133606.1, AL136787.1, AL133016.1, AL050146.1, AL442072.1, AL080060.1, AL157431.1, AF125949.1, AL389978.1, AL110196.1, AF218014.1, BC003687.1, AL359596.1, AL137527.1, AL049938.1, AK026608.1, AL390167.1, AK000212.1, AB060916.1, AB049758.1, AL136892.1, BC003683.1, AL049314.1, AK025339.1, AF111847.1, AB056809.1, AL122050.1, AB060887.1, AB063046.1, AL050149.1, BC001967.1, AL136749.1, AB063070.1, AL136789.1, AL162006.1, AK026741.1, AK026865.1, AF090896.1, AB048964.1, AL133075.1, U42766.1, AF106862.1, AL050116.1, AB050510.1, AB047615.1, AK025084.1, AB047801.1, AK027868.1, AL162083.1, AL050108.1, AB055361.1, AB056768.1, AK025958.1, AL080137.1, AB060908.1, AB019565.1, AL049466.1, AK026045.1, BC006807.1, AB063008.1, AL096744.1, AL122093.1, AL137283.1, AL050277.1, AK026744.1, AL133557.1, AL136799.1, Y16645.1, AF219137.1, AL389982.1, AL117394.1, AL080124.1, AK026855.1, AK000614.1, AL133080.1, AL136768.1, BC002733.1, AL137557.1, AL137459.1, AL133093.1, AL136844.1, AL133565.1, AF097996.1, AB060912.1, AK000618.1, AL512746.1, AK027096.1, AL049430.1, AB060863.1, AK025092.1, AL122123.1, AL122121.1, AK026927.1, X82434.1, BC004556.1, AB062938.1, AK027113.1, BC006195.1, U91329.1, AL359941.1, AL353940.1, AF146568.1, AK026647.1, AL512718.1, AK026542.1, AF091084.1, AL137550.1, AK026533.1, AK026784.1, AK025772.1, AL512719.1, AL359618.1, AL512754.1, AK000137.1, AK026452.1, AF125948.1, AK000083.1, AF207829.1, AK026534.1, AB048974.1, AF271350.1, AK026583.1, AB055368.1, AL050138.1, AK026592.1, AB048954.1, BC001045.1, AL110225.1, AB060826.1, AB060852.1, AB060825.1, AL049382.1, BC004951.1, AK026532.1, AK026959.1, AK000445.1, AB055315.1, AL117435.1, AL133560.1, AF225424.1, AK000652.1, AB052191.1, AL117583.1, S61953.1, AL049464.1, AB051158.1, AB055366.1, AK025491.1, AK026504.1, AL050024.1, AK025414.1, AL117585.1, AL137271.1, BC008070.1, AK026086.1, AK024538.1, BC008899.1, AF177336.1, AP001873.3, AL049300.1, AK026480.1, AK000323.1, AL512689.1, AL136845.1, AB047904.1, AF183393.1, AK027164.1, AL359615.1, AK026528.1, AL136786.1, AL122098.1, Z82022.1, AK025391.1, AL359583.1, AK026353.1, AL136928.1, AK000432.1, AB056421.1, AB063093.1, AK000647.1, AK025967.1, AB052200.1, AL133258.16, AL359622.1, BC007199.1, AB049892.1, AK026642.1, AL122110.1, AK024524.1, AK000718.1, AC002467.1, BC002839.1, AK027204.1, AF260566.1, AF348209.1, BC008382.1, BC008485.1, AL353802.14, U80742.1, AL513015.6, X72889.1, AL049283.1, AL133113.1, AK025209.1, BC006525.1, AK025484.1, AK027116.1, AC007390.3, AL157482.1, AF061943.1, AL137538.1, AL133072.1, AK025524.1, BC008280.1, AL137463.1, AK026947.1, AL512684.1, AB055374.1, AC026464.6, AC022215. 4.</p>
HDPFF39	120	588697	1 - 1242	15 - 1256	<p>AL526869, AL523945, BE794829, AL532486, AL533032, BF969304, BG115956, AL514521, AI871493, BG028151, BF689553, AL531509, BF689896, AA005246, AW392303, AI921136, BE620088, AI921426, AL514522, AI800003, AI571833, AI097128, W68743, AA587786, AI928547,</p>

					<p>AI58884, AI366187, AI469283, BG059843, AI091266, W68721, AA731294, AI023709, BE218286, AI571471, AI628000, AI819634, BE207917, AI247849, AI085331, AW274586, AI752152, AI866693, BE382434, AW264556, AI570330, AA909256, AW602670, BF091955, AI185842, AI627586, AI189900, AI417779, BF822519, BE673374, T81959, AI623337, AI970967, R86832, BE940065, AA074519, BF944761, AW364990, AA865886, AA722301, AI539598, BF095254, AI494220, AA327238, BF345347, H82580, AI571973, AW516484, T81955, AW439461, R56100, W27475, AW470712, BE743030, AW674734, AI953321, AA076557, AA731651, BF056789, AL134661, AW131498, AW772519, AI609719, BF855458, AW073075, AW365079, BF808730, BF526571, R60226, AI918145, T57354, BG253820, BE886275, BF799596, BE938387, AW517642, AW886746, BF951584, BF684157, AW204188, AI032686, BE936805, BE843795, BE933378, AL523946, BF99019, BF980469, AI589371, BG120896, H16171, BE937970, AW938898, T57436, AW882041, BG121424, BF851425, AL532487, BG163558, BF762612, AW138659, AI364407, AW513032, BG105148, AA005140, AI097132, AA767618, AI572822, R86655, BE962190, BF947166, Z43259, BF690126, BG115718, AW663033, AI932620, AI559976, BE620628, AI358271, BG167830, AI924051, AW858522, BF812963, AI804505, AI500659, AI815239, BE883591, AI866465, AI446536, AI815232, AI801325, AI866691, AI500523, AI538850, AI887775, AI582932, AI872423, AI590043, AI923989, AI284517, AI500706, AI491776, AI445237, AI926593, BF811804, AI289791, AW151138, AI889189, AI521560, AW151974, AI500662, AI285417, AI623302, AI539800, AI284509, AW172723, AI582912, AI538885, AI440263, AI889168, AI927233, AI866573, AW058275, AI567961, AI633493, AI434256, AI866469, AI434242, AI805769, AI888661, AF037339.1, AK027698.1, AF037338.1, AC011489.6, BC004865.1, AL133655.1, AL133074.1, AL136763.1, AL133076.1.</p>
HDPFP29	121	628254	1 - 1043	15 - 1057	<p>AW575379, AA769318, AI796662, BG029535, AW269780, AA809133, AA427866, AW953923, AI419264, AW088714, AI400326, BF945261, AI924874, AI150755, AI623762, AI239506, AI619494, AW148696, AI797909, BE327745, AI634907, AW070513, AI186243, AA768972, AA804195, AW674541, BE221186, AW204520, AA292638, AA235326, AW341643, AI005076, AW004816, AW603880, AW007235, AI871816, BE826643, BF222941, BE826639, BE826631, BE826634, AA292639, BE826687, AW514133, AA627727, AI690331, T05561, AW405407, AI673409, BF814220, AW075831, AI923685, AA931499, H56443, AW083896, BG165971, H56444, H16157, T82850, AW131313, AI249783, AA714383, AA548622, AI810663, BF091047, AA810885, R51826, F21597, AA702095, AI832872, AA832395, BF974513, T34785, AA524210, T16401, T90272, R28256, BE826642, AA262993, BF903485, AA568882, AW075840, AA535317, AI909659, R28033, BF814542, AW970732, AI810273, AI262373, BF000060, AI927452, AI679783, AI272283, BF901241, BE559850, AA742649, BF900830, AA922242, AI439758, AI445719, AI738794, AI625812, AI215105, AA749066, AI275641, BG054585, AA527826, BE143233, AA525108, AI950316, AL522808, BG111850, AA643261, AI432644, AI927233, BF771135, AA033725, AI699011, BE883591, AI431307, BG110517, BG113493, BG029667, AI433157, AI648567, AI690946, AI554821, BG252929, AW151136, AI539771, BE897632, AI537677, AI494201, BF812963, AI500659, AI866465, AI815232, AI801325, AI500523,</p>

				AI538850, AI887775, AI582932, AI590043, AI872423, AI284517, AI923989, AI500706, AI445237, AI491776, AW151138, BF811804, AI932949, AI521560, AI889189, AI500662, AI539800, AI582912, AW172723, AI284509, AI538885, AI889168, AI440263, AI866573, AI633493, AI434256, AI866469, AI434242, AI805769, AI888661, AI500714, AI284513, AI888118, AI285439, AI859991, AI436429, AI355779, AI623736, AI889147, AI371228, AI581033, AI491710, AI440252, AI866786, AI610557, AI860003, AI242736, AI828574, AI887499, AW151979, AI539781, AI539707, AI702065, AI885949, AW089557, AI559957, AI285419, AI521571, AI469775, AI866581, AI815150, AI567953, AI446495, AW858243, BG164558, AA806719, BE885490, AI289791, BF811802, AL110306, AI929108, BG257535, BG027628, BF338002, AL045500, AI866820, AL042515, AI561170, BE886728, AI784028, AI890907, AL039390, BF795712, BE895765, BF815930, AI468872, BF802671, AW089006, BF812438, BG260144, AI371251, AL079960, AI866510, BE047852, AI274759, AI866461, AI923046, AI565172, AL047422, AI431316, AL048403, BG168086, AW827227, AA074168, AI433976, AI867068, BG113224, BF725463, BE537531, X79568.1, U28282.1, AK027136.1, AC007383.4, BC006408.1, AB060841.1, AL110280.1, AC026464.6, AL133049.1, AL137294.1, AC023880.5, BC006159.1, BC004431.1, BC008078.1, AC010149.8, AK025209.1, AK026793.1, AL080124.1, AI389935.1, AL137271.1, AC006994.4, AC021325.5, U72621.3, AC016652.5, AI359620.1, AL035458.35, AL133014.1, AF012536.1, BC008417.1, BC001844.1, AL137538.1, AC004987.2, U77594.1, AC008592.4, BC006136.1, AL136843.1, AC011450.4, AL353625.5, AF090900.1, AK026626.1, AC018643.3, BC007998.1, AL137705.1, AB060826.1, AL080234.1, AK026894.1, BC002355.1, AL390154.1, AL136766.1, AL137292.1, AC009087.4, BC008708.1, AL137530.1, BC008280.1, AK027160.1, AF095901.1, AL133444.28, AL353999.3, AC004822.1, BC009395.1, BC002473.1, AL136845.1, AB060888.1, AB060229.1, AK000432.1, AC004686.1, S77771.1, AL353802.14, BC006509.1, AF334404.1, BC009026.1, AL355834.4, AL353594.13, AP001873.3, AL356278.8, AK027217.1, AK025632.1, AK024546.1, AL133104.1, AC005902.7, AK000655.1, AK024747.1, BC000714.1, AK000647.1, AK025484.1, AF056191.1, AF348209.1, AK027161.1, AF120268.1, BC009355.1, AK000391.1, AC006313.1, AL122049.1, AF353396.1, AB063070.1, AK025015.1, AB047631.1, AF179633.1, BC004215.1, BC004908.1, AB056768.1, AK025465.1, AL137665.1, AB060842.1, AL391244.11, AK000450.1, AL512684.1, AB049900.1, AC009484.3, Z82022.1, AF218006.1, BC002343.1, BC006494.1, AK000250.1, AL136768.1, AK025708.1, AB047904.1, AL157360.8, AK025383.1, AL161628.9, AK026591.1, AK000718.1, AL163282.2, AK024992.1, AL136622.1, AL137557.1, AL389978.1, AF285836.1, BC002519.1, AC006112.2, AF225424.1, AB060856.1, BC0007460.1, AB055352.1, AK000212.1, BC007571.1, AC010530.7, AB055303.1, AB047869.1, AL137711.1, AF090886.1, AB060887.1, AF274348.1, AF274347.1, U80742.1, AL13619.1, BC006412.1, AL353807.18, AL136784.1, AL137476.1, D55641.1, AK026542.1, AL080060.1, AK026057.1, AK027193.1, AL136781.1, AF002672.1, AL356747.18, AL133560.1, AK026408.1, AF094850.1, AL359941.1, AF003737.1, BC004945.1, AC004383.1, AL136850.1, AB047966.1, AC010972.3, AL359600.1, AB060837.1, BC006180.1, AF132730.1,

HDPGI49	122	785887	1 - 2669	15 - 2683	AL137574.1, AL353745.7, AL162062.1, AF205861.1, AL121601.13, AL136892.1, AL050138.1, AL445236.22, S76508.1, BC004533.1, AF169154.1, AC024247.4, AC004883.2, BC009033.1, AL035407.15, AL138976.5, AE006462.1, AF151109.1, AL138770.3, AB055374.1, AL136844.1, AB056420.1, AF113222.1, AL512689.1, BC006411.1, AL137256.1, BC007198.1, AL122118.1, AJ012755.1, AL035587.5, BC007031.1, AF271350.1, AK027111.1, AF078844.1, AL132985.4, AK026533.1, AC006222.1, AL117463.1, AF245044.1, AC020659.5, AK024601.1, AF069506.1, AL022165.1, AB047878. 1.
HDPGP94	123	823355	1 - 3867	15 - 3881	BG028956, BF434796, W05746, AW965426, BF509507, BF680194, BF589350, AA287841, BE697901, BE697902, AI032342, BE856794, BE251850, AI342589, AA218952, AW771921, AW118336, N24868, AI301200, AA761846, BF247512, AA911724, AV712358, AA831097, AA040238, AA809475, AA287842, AA252943, AI610808, AA040239, AA422118, AA235003, BF477762, D80028, AA985566, AI051755, AA450350, AI267777, AA768011, AA463666, H96432, AA411233, BE218411, AA332252, AA995400, D81515, AA974489, AA507522, AA653950, BF087088, BE242538, BG005055, AA249308, BF971120, AA487000. AI382347, BE672925, AA328438, AI933550, AV658526, AV659132, F17041, AI378966, AW881484, AU159276, AI457143, BF435633, AL118834, AA299156, AW468555, AI926394, BF727445, BF689260, AI610326, F18611, BF878671, N26697, BF438919, R92170, AA069204, T78609, T62932, AV685376, AI928570, BF850110, T78394, AV718691, AV719171, AI220812, AI193408, AV720907, R84298, AV718419, AI309322, AA826143, F17026, AA724610, AI862212, AI439415, AI890953, H01156, AA347740, AA565837, H49709, AA811111, AL043725, AI147839, F16584, AA904946, AI054162, AA771958, AI570164, BF112065, AA132716, AW604787, BF679645, T06365, AI591332, AL137072.8, AC025097.41, AC016689.3, AC026951.5, AP003117.2, AF274857.1, AL096705.12, AL137881.12, AP001960.2, AP003534.1, AL049564.10, AC023134.5, AL109659.20, AC012450.9, AL133247.1, AL139093.11, AC079906.15, AL513163.8, AC015729.9, AC083865.2, AP001880.4, AC009501.3, AL390027.11, AL359545.12, AC016568.4, AC006313.1, AF250841.1, AP000810.5, AL160052.21, AC010980.8, AP001858.4, AC020717.3, AL139395.6, AP001831.4, AL109759.4, AL158069.16, AC004010.1, AL050309.4, AC002381.1, AC090497.2, Z84720.1, AC017089.3, AL136136.7, AC003051.1, AL049835.3, AC007436.1, AC004384.1, AL158150.14, AC006362.2, AC008817.7, AC008582.6, AL356317.8, AE000661.1, AC007486.1, AL160236.4, AL132800.4, AL358274.3, AL590043.7, Z68871.1, AC025254.14, AP001712.1, Z93019.1, AC004855.1, AP002532.1, AL360157.12, AC008664.5, AC007253.2, AF003529.1, AC018927.6, AL445523.11, AC022443.4, AC004385.1, AC009483.3, AL359400.4, AC009779.18, AC016579.5, AL390039.10, AF280107.1, AC008550.4, AC023426.29, Z84474.1, AL080312.14, AL121788.17, AC021998.4, AC073574.11, AC012669.7, AC005342.1, AL356016.2, AL356265.10, Z84470.1, AC006395.1, AC005018.2, AL445528.16, Z78022.1, AL158819.14, AC026337.29, AL359636.17, AL353897.7, AL365475.1, AL360297.12, AP002026.1, AC090710.16, AL139277.7, AC002429.1, AL355530.6, AC010223.5, AL450338.5, AF128525.2, AL590306.7, AL359925.9, AC026201.3, AL049646.19,

					AF011889.1, AC006596.2, AC020637.9, AL390035.10, AL159980.13, AC018644.6, AL512641.9, AL358434.16, AL133329.11, AL133399.1, AL356019.5, AL445306.7, AC015798.7, AC005016.1, AC084754.14, AF250324.1, AL357115.24, AL355375.17, AC016617.5, AC022116.5, AC009623.6, AL359232.4, AL135923.15, AL022400.8, AL360270.18, AC078848.3, AL353136.21, AC016743.10, AC022268.5, AL163218.2, AP001669.1, AL355888.3, AL121933.15, Z94056.1, AC008912.4, AC019060.5, AC078854.16, AC000059.1, AP002364.3, AC026756.15, AC023892.35, AC069114.4, AC073218.5, AC004917.2, Z97198.1, Z95328.1, AL096867.15, AL133233.2, AL353744.18, AL136520.3, AL590031.6, Z82216.1, AC004945.1, AP003351.2, AC008558.7, AC073964.3, AC003082.1, AC006427.13, AL034396.6, AC022008.3, AC009487.3, AL445495.5, AL357312.8, AC021878.4, AL441927.10, AC009812.17, AJ271735.1, AF235098.1, AL358293.4, AC004053.1, AL160413.7, AL392087.7, AC023795.18, AC009484.3, AP000457.3, AP000484.5, AC012082.6, AF205588.1, AF297093.1, AC006372.2, AC024581.3, AC009514.2, AC025272.6, AL135960.1, Z99572.1, AC083860.2, AL360179.8, AC010884.10, AP002533.1, AC010255.9, AL136109.11, AL021307.1, AC026398.4, AL391379.12, AL355146.13, AC083875.1, AC022212.4, AC008782.6, AL138815.6, AL049641.10, AC016752.2, AC012076.4, AL080239.11, AC015631.10, AF198097.1, AL136090.12, AL022577.1, AL157698.8, AL499582.13, AC005166.1, AC004756.1, AC005060.3, AC008008.2, AC006210.2, AC020896.5, AL031114.1, AL139109.14, AL022151.1, AL391422.16, AL031176.8, AP001331. 1.
HDPHI51	124	460679	1 - 714	15 - 728	AC005946.1, AC018755. 3.
HDPJF37	125	704487	1 - 972	15 - 986	BE262780, BF317450, BF313101, BF207173, AW195799, BE857989, AA311391, AW205695, AI160666, AW262228, AW052051, AA367991, R74203, BF901238, AW026920, R74295, BF880147, AA644389, BE795190, AI934065, BF530635, BF896366, D20643, BC004895. 1.
HDPMM88	126	972734	1 - 4879	15 - 4893	AV715713, BF446914, BG057685, BF898163, AI083524, AI290271, AA318526, BF932901, R78174, C17785, R77809, BF898707, AW795715, AI638633, BF921994, BF904690, AW016805, AC025040.7, AK025125.1, AC016045. 8.
HDPNC61	127	637585	1 - 1396	15 - 1410	AA847865, AA483400, AI016714, AI051725, N62194, BE047259, BE327006, AA483411, AI554330, AW874660, AA933624, N66755, AI825794, AW327616, AA902896, AA725234, AI769182, BF448730, AA054669, R60056, AA594900, H05474, T16298, AA977118, AI671131, AA054722, AA650410, BE719696, BE719698, R43427, AA716570, T82929, AW327262, BE044255, AA761969, AW974625, AA916000, T34734, BF817206, AA805766, T90105, AI249880, AA342241, AA811545, AW956711, AA484223, AL354808.24, AC003098.1, AC079602.15, AL049569.13, AC004166.12, AL450325.5, AC005288.1, AC005736.1, AL157838.24, AC027644.9, AP000350.1, AC011475.6, AL022238.1, AC005098.2, AL096791.12, AC006261.1, AL022476.2, AC090944.1, AC008569.6, AC007899.3, AL590763.1, AC020917.4, AC087071.2, AL359397.3, AL135752.6, AC013726.7, Z85986.1, AL354815.10, Z93015.9, AF053356.1, AC002302.1, AC005488.2, AF064861.1, Z83826.12, AL357515.26, AC016637.6, AP001748.1, AL445645.10, AL499628.1, AC020931.5, AC004826.3, AL359091.10, AC004965.2, AL353653.19, AP002852.3, AC020750.3, AC004867.5, AC006001.2,

					AP001705.1, AC005995.3, AC010150.3, AL139289.6, AL031005.1, AL355392.7, AC005077.5, AC006966.3, AC005056.2, AL135901.23, AC009144.5, AP001727.1, AL163279.2, AC009753.5, AC004699.1, Z84466.1, AL157938.22, AC083884.6, AL050341.18, AL355543.13, AC004820.2, U95090.1, AC005844.7, AL353804.22, AL163032.3, AP002812.3, AC005052.2, AL049776.3, AC006117.1, AC007220.4, U95740. 1.
HDPND46	128	637586	1 - 1713	15 - 1727	BG058578, D20888, AL034424. 9.
HDPOE32	129	897276	1 - 1339	15 - 1353	N43024, AA284735, N30921, N33362, AA736727, AA477254, W31624, AL533888, AI350205, AA306490, AL520318, W32089, BE395042, W42796, BE251326, AI951749, AA464683, AI694661, AA298928, AI571803, BE257270, AI021931, AI871631, AL530622, AA071502, C14760, AA622514, AI143235, BE005514, BF216867, AA297690, BE005513, AI023746, AI498301, AW028350, AA477253, BE045131, BF927531, AW024940, AI240266, AI493740, AW295451, AI418206, AI418223, AW779350, BG055383, AI245358, AI911036, AA759227, AA602479, BF215223, AW294426, W89051, AI343854, T62095, AV736738, AI767945, AA977564, AB026899.1, AP000500.1, AC011811.42, AC012507.9, AC006365.3, AC004847.3, AL034376.10, AC005094.1, AL079304.3, AL121857.5, AL355074.5, AC020983.7, AL031407.3, AP002028.1, AL157382.14, AC012512.7, AF063605.1, AL034396.6, BC000642.1, AL163194.5, AC019041.8, AL138720.19, AL356257.14, AC084881.19, AL136374.4, AC008009.4, AL353616.13, AF001548.1, AC078994.3, AL163639.3, AC022002.4, Z84474.1, AP000810.5, AC026421.3, AL162378.16, AL353748.13, AP001694.1, AL136137.15, AC078961.23, AL390316.6, AL024458.1, AC005678.1, AC003012.1, AL139809.16, AP000080.1, AB053170.1, AL049743.10, AL353752.6, U95740.1, AL590074.3, AC003662.2, AC010146.13, AP000086.1, AC019187.3, AL121694.4, AL139382.12, AC005042.1, AC008795.6, AL390027.11, AL133396.2, AP000564.1, AC005510.3, AC024028.10, AC006441.13, AL132985.4, AL080239.11, AL109935.39, AP000964.2, AC073866.16, AC002086.1, AC083867.4, AP001718.1, Z92844.1, AL158819.14, AC005023.1, AC005050.2, AL391867.5, AC007991.7, AP000344.1, AL357752.19, AC005697.1, AL355481.12, AC006452.4, AP001691.1, AC006974.2, AC020987.8, AC004859.2, AC008109.6, AC019205.4, AC010348.4, AC019072.7, AC012067.2, AC004584.1, AL390840.17, AC008270.3, AL390800.4, AC005225.2, AL356052.14, AC004597.1, AL512666. 6.
HDPOH06	130	683371	1 - 2490	15 - 2504	BE790341, BG105222, AV707856, AW955948, AI378660, AA669141, BF725031, AU154522, AI985796, AA688220, AI042515, AI372881, AI014423, AW025175, AI335099, AW263024, AI491990, AW128917, AI570270, AI128127, R91019, W85883, AW474941, N59550, AW305279, BF931700, AA679558, AV653236, AI635705, AI559984, F00878, AW340645, R08677, W85967, AI262108, T98198, AA670170, T53837, BF926938, BE937947, AA337112, AA583164, AW888374, R88760, BF091472, AA902605, BF935752, N78291, BE766705, T98199, AI540509, AK001709.1, AC018648.5, AC003108.1, AC003684.1, Z95152.1, AC010530.7, AC008760.6, AC073101.7, AF334404.1, AC004694.1, AC074121.16, AL391122.9, AC011445.6, AL354815.10, AC010618.7, AC002365.1, AF243527.1, R08585.

HDPOZ56	131	135231 9	1 - 1891	15 - 1905	AI859620, AI830021, AI949469, AI887204, AI218392, AW194364, AW511272, AI307671, AA970014, AW582666, AW609988, AI873619, AC011452. 6.
HDPSP54	132	744440	1 - 3077	15 - 3091	BG256849, BG261011, BG178729, BG110345, AI923220, BE466885, BF667257, AW271504, AW243442, BE466659, BG171469, AV661528, AW271637, AW516811, N36059, AI804888, BE882420, AI650826, BF815232, AW964507, AI921747, BE936373, BF984751, BG259707, AI392784, AW076096, AI807747, AW103424, AA604757, AA633209, AW778887, AW418987, AW242326, BE622192, BF666519, BF978796, AW014203, AI925261, BF853590, AW131363, AW514756, N33223, AI819108, AI126250, AV649748, AI953896, AV714556, AI524472, BF697124, BE218100, AW629098, N21567, AI694687, AI700209, AA731730, AA577191, BE219931, N33824, BE567212, AW778908, AW087660, AI990562, BF792681, R52426, AI559108, AA743389, N35579, N25189, N30972, BF667662, AI339587, N24947, AI376459, AA742979, N27426, R23308, AI125720, AA954281, AI801129, AW087669, AI701246, AI245517, T26975, BF572334, BE177998, BE564497, AI636147, AI640713, N41938, H97662, AI243263, BE967025, AI572028, BE543895, H29641, BE762905, BF246305, Z46022, H29640, BG223352, AI270534, AI983198, H99399, BF965116, BF692452, Z42169, AI521060, BF102948, R82562, AV646807, N34709, AV646406, R23233, AA373475, BE005657, AA319637, T34245, BG104469, W20047, AW962829, BF572695, AI369988, AI741908, BE830524, H29549, D78710, Z41637, H29548, AA833897, AI367191, AA659275, AW899997, F01708, BF697465, AI246035, AI219239, BF154447, AI221561, AI273738, AI281168, BE005723, BE170424, AI685342, BE882847, AB007962. 1.
HDPTD15	133	692917	1 - 1382	15 - 1396	AA428414, AL042853, AA363501, AA723017, AA513999, AI547286, BE072237, BE044986, BG008598, BE153851, AA642060, AA363207, AA828704, C15073, AU147529, AA369477, AW974890, AA483034, AA593060, AI285521, AA502103, AA558697, AA310158, AW851028, F26152, AA515435, AA828680, F36373, T66105, AA658235, AA551509, AA634227, AW844234, C18357, BF805334, BE958096, BG056233, BG059938, C18360, AA084863, AI133164, BG056088, N43757, BF769505, AA715609, AA419263, AA503947, BF869171, AA653964, AA301813, AW673241, AA450199, AW580735, AA557686, BE153330, AW589633, AI921649, AV709707, AA318652, AI376100, AW955577, AW276435, BF438574, AA021552, BE072020, AW664161, AA715362, BE221335, BF827669, AI453383, AW074059, AI356904, AI564284, BF743037, AW994731, AV759464, N66067, F25593, AI355206, BF769371, AI922654, AA747480, AW575719, AA829106, AA364701, AL041706, BE206021, AW274349, AW953770, AW089789, F36273, H58672, BF940837, AW169136, AI446464, AI372413, AV700545, AV699709, AV700498, AW303196, AW301350, T08638, AU158130, R13151, T96279, AI284640, AA654998, AV700988, AA364193, BE153327, AW249835, AA136829, AA309874, AC020728.4, AL137787.11, AC068533.7, AP001752.1, AP001053.1, AC004941.2, AC005166.1, AL021579.1, AC008013.8, AL133479.11, AL139022.4, AB016897.1, AL138718.17, AL096712.20, AC037423.16, AC004884.1, AC008733.7, AC007163.3, AL137794.5, AC007312.1, AC078929.27, AC007285.3, AC011533.6, AC009194.8, U95740.1, AL121934.17, AP000144.1, AC006449.19, AC007628.3, AL031591.19, AC027126.4,

					AC011475.6, AC004672.1, AL137068.10, AC007318.4, AL390798.3, AC012076.4, AC008651.7, AL121893.21, AJ295844.1, AL118520.26, AC090937.1, AC004593.1, AJ277546.2, AL139331.19, AP001132.4, AL035681.13, AP001331.1, AC016721.11, AL035413.19, AC009950.6, AL021786.1, AC002429.1, AC007536.9, Z69918.1, AC005625.1, AL161665.5, AL138703.10, AC016831.1, AL031275.1, AP001627.1, AC009516.19, AC006028.3, Z98200.8, AL359400.4, AF029308.1, AP001747.1, AC090514.1, Z86062.1, AC005837.1, AC018797.4, AL109802.6, AB017602.1, AC034305.6, AC005888.1, AC078841.4, AL353597.20, AL031736.16, AC010170.3, AC024571.4, AC005799.1, Z23567.1, AC005225.2, AL109799.6, AL109965.34, AL121928.13, AC024341.9, AC015550.18, AL590106.7, AC010269.5, AC018751.30, AL121890.34, AC068193.7, AL137077.31, AC015651.18, AC004933.1, AC021092.1, AL138706.9, AL137244.28, AC006976.2, AC020663.1, AC008546.6, AL022323.7, AC010235.6, AC006536.2, AC004010.1, AC010489.4, AF064857.1, AC007011.1, AL159977.10, AL160032.14, AC010651.7, AL109804.41, AL031683.2, AC008569.6, AL451049.11, AL391478.14, AC005696.1, AC004453.1, AC024561.4, AC005703.2, AC004905.1, U22376.1, AC004158.1, AC012380.1, AC002400.1, AP001628.1, AL136308.4, AC066612.7, AL139095.15, AL356601.14, AC005215.1, AL356776.21, AC006435.7, AF312032.1, D83737.1, AC009068.10, AC009319.19, AC010134.4, AC005792.1, AC022007.3, AP000252.1, AP001717.1, AP000553.1, M87918.1, AC090042.1, AC005052.2, AL512363.11, AF224669.1, AC002395.1, AC011739.7, AL162503.12, AC073138.3, AF137396.2, AL139328.8, AL356858.19, X77531.1, S78429.1, AP000336.1, AF111168.2, AC004894.1, AC004134.1, AL022476.2, AP000031.1, AC005680.1, AL133548.6, AL049859.7, AL358174.12, AL035608.11, AL161727.15, AC008670.4, AC005736.1, AL121834.20, AC004478.1, AP000215.1, AL513550.9, AC024067.4, AL449363.12, AC026120.33, BC002464.1, AL590420.5, AC011746.6, AL109984.14, AL591004.3, AC020550.4, AL590762.1, AC073325.8, AL390295.10, AC005887.3, AC021016.4, AP000313.1, AC007102.4, AL023693.25, AF108083.1, AL049613.2, AL445201.14, AK022268.1, AL162426.20, AL008629.9, AC090043.1, AL133411.8, AC016617.5, AL391114.12, AL050312.8, AC008277.4, AP000776.4, BF982785, AI815076, AW166997, AL079767, AW151042, BF823103, W63598, BF878473, AA449913, AA976313, AW798524, AA479330, AA846290, BF898435, AA836589, AA630200, AI341675, AI434208, AA157695, AI184716, AI361509, AI216438, AI924429, AI244502, T87329, N26990, BF883126, AI694074, AA157771, AI682580, AA304298, BF883106, AW848681, T87430, AW376555, AW376601, AW376609, AW848666, T64266, AA127194, AA308797, AA854135, T70082, AA974005, T98394, T70152, AI219259, AA304365, AW291861, BF883705, R82980, AA400789, AA449914, AI424501, T98393, AW376580, N40111, BF900907, AI301920, AA442329, AW300876, BE512905, BE902037, BE273884, BE901865, BE166105, R82979, BE311462, BE903644, BE901108, AI284060, BG171620, AL515147, BF811804, AI889208, BE875380, AI628325, BF792951, AI682915, BE906273, AI434233, AI436446, AI362391, BF815930, AI561147, Y18474.2, AJ130718.1, AB011263.1, AK025377.1, AF092032.1, BC003062.1, AB020532.1, AL365451.1, AL365452.1, AL365450.1, AL133448.4, AB031537.1, AB031536.1, AB031535.1, AB031531.1, AB031530.1,
HDPTK41	134	744824	1 - 1550	15 - 1564	

						AB031532.1, AB031533.1, AB031534.1, BC008649.1, AF033827.1, AL133020.1, BC007571.1, AL133074.1, AL136850.1, AL050366. 1.
HDPUG50	135	684120	1 - 1720	15 - 1734		AL515943, AL520278, AL531137, AL515942, AL520279, AI217895, AW960744, BF970078, BF001249, BF036496, BE395420, AI983150, BE277851, AW385698, BF979048, BF688139, BE395502, AW374106, AI660124, BF541042, BF210794, BF036241, BE567389, BE778929, BF209890, BF103631, AI339010, AW374124, AA166971, BE564629, BE971080, BE276625, BF509403, AA542906, AA689356, BF695952, AI285269, AI346870, BF541205, BF030313, N27706, BF243030, AW236815, BE567683, AI821227, AI821074, BE566782, AL134542, AA166818, BF570861, BF059406, AA836112, BF695731, D20721, BF130491, BF677074, BG118818, AI221030, AA627350, AW027663, BF106059, N35710, BF674060, BF029128, BE933586, AI221246, AW372396, AI285231, T95430, AW372395, AI699709, AL134543, AA055338, AA449417, AW197834, BF030982, R83129, AI418208, AA375954, AA450383, AW958166, AA961046, N20259, AA336834, AA226636, AI911109, AA225691, N20865, AA825421, AI932771, BF697063, AW197872, AA370379, N29162, C03633, AI620095, AA055337, BE694074, AI932771, BF697063, AA976076, BE468082, AI821821, AA173926, AA173884, BE857593, AA569611, AI821883, AA772955, AW383971, AI432644, AI431307, AI431316, AI432666, BE898721, AI431238, AI623302, AI432653, AI431323, AI921241, AI431347, AW968355, AW971740, AI431350, AI432655, AW081103, AI431321, AW968356, AL042853, AL042729, AI431243, AI431230, AI431328, AI432654, AI431310, AI431312, BE672745, AI432650, AI432677, AI431247, BE672644, AI432657, AW972093, AW968729, AI492519, AI431231, AI791349, AI431257, AI431235, AI431315, AI431354, BE672759, AI431318, AI431353, AI432661, AI431246, AI432649, AI432643, AI432675, BE672719, BE672732, AI431337, AI432651, AI432647, BE672640, AI432674, AI431330, AW972092, BE672622, BE672627, BE672767, BF448552, AW129223, AL045327, BE672748, AW972090, AI431248, BE672742, AL042931, AI432665, BE672626, AW972091, AL042519, BC001133.1, AJ224875.1, AL133082.1, AF064854. 1.
HDPUH26	136	866433	1 - 2902	15 - 2916		AL525441, AL525265, AL528202, AW964372, BE747248, BE743063, BF793839, BE005995, BE870109, AV706482, BE645327, AV698161, BE272135, BE254341, AV704424, AV706294, AA772122, BG153419, AA777796, BE645332, AI743322, AV707082, AV706285, BF382272, BF514943, BE018051, BE673957, BE301907, BF114727, AW964371, BF530465, AA897780, AI890748, AI559637, AI688995, AW780354, BE206397, AW137052, N51699, AW103016, BF794314, AA528004, AW662431, AW085759, BF313538, AI765664, AI954974, AI570150, N20494, R87549, F31312, AI245467, AI991886, AA112198, BG170315, BG178458, AW273510, AI435207, AA004881, AW964399, AA005087, N25526, AW608346, F36783, AA587960, AI815015, AA454482, AW662721, AA318288, AW993077, N29111, AI247285, AA911896, AI766414, R91507, AI279757, BF313030, AW242248, AA707000, AI367676, AW139115, T16478, AW504841, W90115, R12114, T32805, AI675726, AA346284, BF765331, AW993187, AA317950, BE169534, BF692514, AW086086, AA186891, BF749263, BG013421, BF765334, R36868, AW769864, AW884956, AI972497, BE170268,

HDPVW68	137	812737	1 - 1734	15 - 1748	C01229, AA348258, AI953592, F27014, AA599852, AI914300, N51791, BF676529, AI868860, T48372, AI824747, F30177, AI810802, AI263284, AW611772, AA188514, AA603987, T32655, AL528203, AI625886, BF874301, AI346660, AA903746, F35605, AW820935, AW577918, AK000303.1.
HDPVH60	138	796865	1 - 3102	15 - 3116	AW295848, AI132995, T48851, AI247571, AW469884, AV734061, T48852, BE378325, AW571432, AA344713, AW131386, AU138048, AW190967, BF896891, AA400508, AA400618, AA835515, AF170485.1, AJ007395.1, AJ130710.1, AF193441.1, AJ130711.1, AF227924.1, AB026265.1, AF247180.1, AF178981.1, AF223403.1, AF195092.1, AC020914.7, AF277806.1, AC011473.4, AF135027.1, AF310234.1, AF287892.1, AC008750.7, AJ130712.1, AJ130713.1, D86358.1, U71382.1.
HDPVW11	139	103699 7	1 - 2325	15 - 2339	AA503239, AA005023, BG058640, BF439950, AA494553, AI688402, AI797733, AI436404, AA292931, AW273747, BE675352, AI475570, AA227825, AW062928, AI940630, AI940605, BF356100, AI244665, AI940646, AW374287, AI940639, AI016022, AI348158, AW374286, AI475793, AI222804, AA740395, AI289241, AA731769, AW374280, AA293061, AW176407, AI940666, AI952797, AI863905, AW751215, BE074921, AA347230, AW751228, AI253625, AA722775, BE074922, BE074923, BF091018, AI940657, AA830985, BE246530, AA005022, BE245464, AW194142, BE245946, AW845618, AA679298, AA553743, AW845617, AI986465, AI656229, AI587517, AW845579, AI439199, AI439202, AA905818, AA227999, BF365504, AA347231, AA300784, BF365509, AW062885, AL048537, T61473, AW885247, BG057915, BE247510, AW516362, BF756544, AI762964, AA563914, AI469789, AA903221, BG112718, BG112102, AW411397, AK027414.1, AK027416.1, AK025212.1, AK025362.1.
HDPVW11	139	103699 7	1 - 2325	15 - 2339	AV762219, AL529216, AL529217, AL521330, AL521329, BE277176, BE798017, BE274847, BE868280, BE311800, BE543175, BE410652, AW967107, BE304534, BE9000339, BE893443, BE276851, AI679161, AA193416, BE302421, AW474478, BE409098, AW474521, BE349259, AI146528, AI041230, AA614445, BE743095, AI343535, AI400378, BE890338, AA127444, AA458592, AW245738, BE265039, BE281384, AA807821, AI669961, AA317883, BF514665, W48808, AI292224, AI292150, AA902490, AI302370, AI810191, AW245381, AA713501, AI708068, AW975539, AI469722, AA418282, AI192592, AW975538, BE041714, W49817, AA764785, BE742888, N50655, BE389280, N47165, BE241970, AA884873, BE389259, AI826827, AW673387, BF055737, AV746964, BF341801, AW675735, BE886291, BF924882, AL039086, AW403717, AV682124, AL515375, AW806761, AL135025, BE621256, BE047737, AL514929, BG030364, BG027280, BE909009, AA291456, AI364788, N50750, BG249582, AI648663, BE620444, AL036736, AI590120, C16221, AA508692, BF854113, AW827289, AI922901, AW302988, BF909758, AV729336, BG035511, BG118829, BF343172, BG168696, AI498579, BE538485, BG112879, AL045266, BF970449, AA640779, BE048071, AI829327, AI689420, AI888944, BE965192, BE880190, BG165051, BE903856, BG113299, BF339322, BE874133, BE875407, N80094, AI921248, AV756074, BF828567, BG122481, AL041772, BF968205, AW006046, BE964812, AW071417, AI308032, AI344785, BF696282,

					<p> A1859464, AW020693, BF792494, BF343363, BE905749, AW088899, BE965355, BE544111, A1366992, AW162071, A1608676, A1610645, A1696819, A1932794, A1344928, BF812933, AW103371, BG163618, A1345608, BF089711, BG120816, BF792961, BF970990, A1569583, BG028116, A1174394, A1344817, A1627988, A1923768, BE047852, BE910703, BF822127, BF814525, BF814409, BE966388, A1670009, A1306613, BG057418, BF815196, A119791, BF672397, BE543089, A1335411, BF915208, A1923370, BF814335, BE968552, BF971016, AA494167, BG031815, BE880550, BF792469, BG032856, AW238730, AL047763, AA225339, BF816042, BE047952, A1571909, BF827575, BG180996, A1680162, BF526262, BF910810, BE904051, BE964512, AW117882, AW161579, BE95585, BG109270, AW827150, A1340582, BE045182, A1608936, BE965067, BF810144, A1874166, A1554245, AV743962, BF904258, A1284131, AV761001, AW023590, BF965460, AL042628, BG036846, AL036836, AW170635, A1686906, BE965121, AL120853, A1521012, BG029667, A1349645, AL036980, AW074869, BE910373, AA427700, A1632408, A1251205, BF885081, A1799183, A1284509, AW999049, BG257535, AW050522, AW068845, A1564719, A1312428, A1591420, A1281772, A1889376, BG112718, A1801325, BC003041.1, AK027499.1, BC003654.1, AK024538.1, AK027113.1, AL080060.1, BC008488.1, BC008417.1, AK027204.1, AF090901.1, AF091084.1, AK000647.1, AB060916.1, AL133075.1, AL359941.1, AK000652.1, BC008070.1, AF348209.1, AL353625.5, AB055303.1, AB060887.1, AK000618.1, BC004951.1, BC008280.1, AK025772.1, AL137527.1, AF026816.2, AL080127.1, AK025524.1, AF183393.1, AL136892.1, AL122110.1, AL122098.1, AF090903.1, AK026534.1, AL157431.1, AL389982.1, AK025339.1, AF125949.1, AK027164.1, AK026532.1, AL136789.1, Z82022.1, AL512719.1, AB063070.1, AL359583.1, AK026744.1, BC006412.1, AK000718.1, AL390167.1, Y16645.1, AL110196.1, AL359596.1, AK025958.1, BC008485.1, AF061943.1, BC004556.1, AL122123.1, AK024588.1, BC003687.1, AL110221.1, BC002733.1, AK026947.1, AB063084.1, AK026855.1, AL133640.1, AL117460.1, AB060852.1, AB051158.1, AL050138.1, AL136799.1, AF078844.1, AL136928.1, AK026542.1, AB055361.1, BC002839.1, AK025084.1, AL512733.1, AL117585.1, AF090900.1, BC008365.1, X65873.1, AL133565.1, AL512754.1, AL359618.1, AL137271.1, S78214.1, AJ242859.1, BC007021.1, AB060825.1, AL512718.1, AK026865.1, AL049452.1, AF090934.1, AK027096.1, AK000137.1, AL049382.1, AK026045.1, AF225424.1, AL050277.1, AB056421.1, AL137538.1, BC004958.1, AK026630.1, AL136768.1, AF260566.1, AK025484.1, AL353940.1, AL137463.1, BC007198.1, AL133606.1, AL122121.1, AJ012755.1, AF104032.1, AK024524.1, AB048953.1, BC008899.1, AB047615.1, AL049314.1, BC005168.1, AK026959.1, AF177336.1, AB056420.1, AB062938.1, AL117457.1, AL136586.1, U80742.1, AL122093.1, AF106862.1, BC006195.1, AL049466.1, AL136749.1, AB047904.1, BC001967.1, AK000486.1, AK025092.1, AL080124.1, AL136787.1, AB055315.1, AB052191.1, AL512750.1, AB060912.1, BC003683.1, AK025967.1, AK026597.1, AK000445.1, AK026583.1, AB060863.1, AB063046.1, AL137648.1, AB048954.1, AB060929.1, AK027213.1, BC001045.1, AB052200.1, AF125948.1, AL136845.1, BC007199.1, U42766.1, AK026592.1, AL162083.1, AL137550.1, AL137557.1, AK027116.1, </p>
--	--	--	--	--	--

					<p>AL133080.1, AB063008.1, BC006807.1, AK026741.1, AL162006.1, AL136843.1, BC008387.1, AL133557.1, AK025632.1, AL162062.1, AL133560.1, AL050108.1, AF090896.1, AL133113.1, AB056768.1, AK026408.1, X82434.1, AB060826.1, AL050024.1, AL512684.1, AL080159.1, AK000432.1, AB060883.1, AL117583.1, AL136844.1, AK025414.1, AB060908.1, AK026784.1, AK000083.1, AF207829.1, AF219137.1, AB055368.1, AL050116.1, AL133016.1, AK026927.1, AK025254.1, AL512765.1, AL050393.1, AL117435.1, AB019565.1, AK027868.1, AK026526.1, AK026086.1, AL133093.1, AB048964.1, AL389978.1, AL122050.1, AF218014.1, AL049464.1, AL512761.1, BC006164.1, AB055374.1, BC001349.1, AL512746.1, AB047801.1, AK026452.1, AB049758.1, AL096744.1, AK000323.1, AL359615.1, AF146568.1, AL080137.1, BC008382.1, AK026504.1, AK026642.1, AK025491.1, AL049430.1, AL583915.1, AF111847.1, AL442072.1, BC008983.1, BC009294.1, AK026629.1, AF090943.1, AK026353.1, AK025906.1, X69819.1, AB055366.1, AL512689.1, AL050149.1, AK026593.1, AL442082.1.</p>
HDPWN93	140	992925	1 - 2665	15 - 2679	<p>AL518824, AL518825, AL528951, AL528952, BF339524, BE546359, BF966792, BE736522, BE737435, BE883235, BG109398, BE314676, BE787143, AL534022, BF446115, BE894833, BE870112, BE881800, BE258349, BG250236, BF196311, BE894832, AW769380, BE262368, BE882948, BE259378, BG251409, AA432202, AI890824, AI753494, AI651671, AA993211, BE246045, AW001898, AL039524, AI800905, AI246773, AI682295, AI658613, BE273831, AI631136, AW189302, AI372827, AI050708, AA531521, AI346388, AI683842, AW296359, AW372955, AI685246, AI589722, AW271749, AW804759, BE548044, AA622365, AI352313, BF906035, BE163138, AI088281, AI372826, BF109450, AI015389, AI539826, AA349564, AA448189, AI760986, BE882927, BE247210, H15544, H15545, AA349563, BF924519, BE245469, AW804423, H09846, AI991731, AA320029, AA383782, BF804839, H15604, W67789, H15603, AI015277, R33930, BF869179, AA543091, AI469944, R48594, BE301391, H09761, AA830547, AA505499, BF809086, AA320560, BE273649, AA326027, R79459, AA322654, I32015, C20992, AI828309, AW117647, BF000032, AW190887, BF736822, AW262975, AA317254, AA143736, BF381075, AW103622, AW050451, AI609346, BE720302, N21451, AI905534, AA282625, AW007401, AA284991, AA621245, BF841809, BE146295, AA143707, AI811818, BF326108, AA393671, BE242665, BF746024, AI678229, BF799280, AA429592, AW407359, BE075823, AK025000.1, AK025622.1, AC004590.1, AF086245.1, AP001434.1, AP000161.1, AP000020.2, AP001731.1, AL137367.1.</p> <p>BG054851, BF439942, AI141684, BG008949, BE677186, AA242853, AI281834, BF433831, N50984, AA826047, AW014432, AA977801, AW770255, AA984041, T64272, AA994205, AA252172, T64144, AI361098, BE146421, AW084330, AI280735, AA931748, AW071613, R09320, AA448980, AI990634, R09211, AW388104, AI147841, AI198101, AW517751, AW238793, BF969846, AI627898, AU156992, AW074546, AW072130, AI276023, AI457707, AI394689, AI953242, AI539262, BE907440, BF984530, AI886594, AW761557, AW082532, AI613471, AA947158, AI380329, AW079334, AI636788, D44958, AI568132, AI274769, AA150147, AI624304, BF828567, AI933785, AW248417, AL036548, AI934147, AI343038, AW302662, AI336506, AI254251, AW303238, BF054886, AW268290, AI318301,</p>
HDPWU34	141	630354	1 - 1263	15 - 1277	

AI866691, AI627621, AW263569, BG028962, BF792115, AW073898, BE877316, AI805688, BE874060, AI554218, AI445620, AW151652, BF055737, AI335411, AL043084, AI537190, AI445812, AI890057, AI889133, AV709604, AV703599, AW050725, AI355779, AI537516, AW149876, AI679261, AL040011, AI690927, AV743631, AI539771, AI249877, AW152214, AI340570, AW411412, BG178911, AI926593, AW301381, AI888621, AI357599, BF911528, BF909758, AI677983, AA088789, AW129993, AI623797, AW055252, AI628188, AI539632, AI349017, AL037521, BE138941, AI696626, AI432237, AI349762, AI366985, AI802826, AI270039, AI824557, AI628325, AI582240, AI583578, AI308035, AW268060, AI627909, AA493923, AL039587, AW302973, AI282967, AL042981, AI625926, AI559863, AI580290, AI571699, AL038154, AI677797, AW302073, BG105342, BF816041, AW084097, BE967265, AI824503, BF913615, AA731026, AW083804, AA878532, AI678446, AI318254, AI951222, AW193841, BF816031, AI365256, AI446405, BE393551, BF817746, AI699154, AI285439, AI744243, F34309, AA555145, BE974031, AA580663, AW081343, AI819516, BE613727, AI799313, BF868927, AI309306, AW104141, BG107564, AI272116, AI433611, AI623388, AW025279, BF925370, BE294431, AI357191, AW131952, AW089327, N74355, AI963172, AI560806, AV742848, AI359725, AW020455, AI824360, AI801561, AI648502, AI783569, BF339548, AI859644, AV714391, AW151847, AI374827, AI866573, AA835966, AI499986, AI689463, BF751997, AI499960, AI636507, AI803749, AI886055, AI873638, AI378131, BF814357, BE875959, BG033220, AI682121, BE964645, BF726001, AI289791, BF924884, AW089844, AI819016, AW029216, AW970048, AI568138, AI345471, AI613422, AW080335, AI318609, AB020598.1, AC004126.1, AK023577.1, AK000546.1, AK000450.1, BC008673.1, U75370.1, AL133053.1, AL110171.1, AB048995.1, AF188698.1, BC003111.1, J05032.1, AJ296345.1, AK000344.1, AL023657.1, AL137286.1, BC006091.1, BC002455.1, AL122111.1, BC001675.1, AL031346.8, AK027204.1, S77771.1, AL137659.1, AK000718.1, BC000386.1, AK024570.1, AF151109.1, AL110158.1, AF369701.1, AL080159.1, AF285167.1, AL136979.16, U62966.1, AB060856.1, AL389935.1, AF040723.1, BC001349.1, BC002737.1, AL512718.1, AF012536.1, BC000217.1, AB060883.1, AB063008.1, AB049900.1, AB060916.1, AC023880.5, AC078878.20, AC021325.5, AC009484.3, BC009341.1, AK026624.1, AL389978.1, AF067420.1, BC002524.1, AL035407.15, AK027113.1, AK000137.1, U39656.1, BC005816.1, BC001293.1, BC004336.1, AL136792.1, AF239683.1, AB063074.1, BC004874.1, AL133565.1, BC004943.1, BC002978.1, AF038847.1, AL359583.1, BC003548.1, AL136586.1, AL512719.1, S76508.1, BC005002.1, BC005858.1, AL359600.1, AK026571.1, AL137536.1, AL137711.1, AF274348.1, AF274347.1, AL133014.1, Z49258.1, AL136984.20, BC004960.1, AK026408.1, BC001774.1, AL136850.1, BC008649.1, AF245044.1, BC008895.1, AL162003.1, AF162270.1, AL117626.1, BC007571.1, BC007517.1, BC003682.1, AL137574.1, AK026627.1, AK025015.1, BC005843.1, U00686.1, AF040751.1, AL136752.1, AL137641.1, X99226.1, AL161427.16, AL161628.9, AF090934.1, AF218005.1, X69819.1, AK024974.1, BC003569.1, AK026182.1, BC004431.1, AF090886.1, AK024747.1, BC007198.1, BC008078.1, BC002397.1, BC005402.1, BC009033.1, BC007417.1,				
--	--	--	--	--

					<p>AL136615.1, BC001328.1, AL133645.1, AL049382.1, BC006408.1, BC007355.1, AB047801.1, AK027105.1, AF205861.1, BC007534.1, AL137660.1, AF155827.1, BC006807.1, AC024247.4, AL080060.1, BC004117.1, BC000550.1, AB050411.1, AK027104.1, AF030165.1, AB050534.1, AB048914.1, L30117.1, AL049460.1, AK026793.1, BC000713.1, AK025541.1, AB060903.1, AK000753.1, S69510.1, BC009253.1, BC000054.1, BC002574.1, AF081197.1, AF081195.1, AC003032.1, AF095901.1, AL121828.17, AL355143.17, AL031732.8, AL353594.13, AL512454.6, AL135933.11, AL034417.14, AC010137.3, AC004822.1, AC004686.1, AL138704.12, AC010081.4, AC006994.4, BC008365.1, AL137463.1, BC000007.1, AL136799.1, AF111112.1, BC003410.1, AL359941.1, D83989.1, BC003687.1, Y14040.1, AL133070.1, X83544.1, AB048913.1, AK026642.1, AJ299431.1, AK000636.1, AK025407.1, AL157479.1, BC008485.1, AL122098.1, AC008507.8, BC007522.1, AL359623.1, AF044323.1, AB056768.1, AB062978.1, AL049452.1, AF104032.1, AF348209.1, AL034400.2, AL353625.5, AK024622.1, BC008185.1, BC001418.2, AF026816.2, AK026464.1, BC004950.1, BC001236.1, BC002373.1, AF217966.1, BC006508.1, AL389983.1, BC001785.1, BC006164.1, BC008040.1, BC004513.1, BC006180.1, M86826.1, BC009272.1, AK026452.1, AK025524.1, AL133016.1, BC001336.1, AL122118.1, AB047627.1, M64936.1, AF098162.1, BC008417.1, AC007748.2, AL353745.7, BC002911.1, BC004926.1, AF271350.1, BC002688.1, BC002399.1, BC006089.1, BC004297.1, AK026045.1, BC003110.1, AL353957.1, AF177336.1, AK026885.1, BC006410.1, AB063084.1.</p>
HDQHD03	142	130917 5	1 - 1252	15 - 1266	<p>AA769067, AA907349, BE676751, AA804234, AA906120, AA830952, AA743729, AA835876, BF434668, BF838119, BE837591, BE837571, BE827732, AA318133, BF807079.</p>
HDTBD53	143	972757	1 - 2789	15 - 2803	<p>AL521719, AL039239, AL522288, AL521718, AW850549, BE745185, BG036401, BF971064, BF982318, AV752274, BE410288, BF970662, BE179100, AA115485, BF037889, AI903708, W74580, AV752030, BF207332, AW069193, AW850706, BE260313, AA114996, AI147007, AA287865, BE294206, AA779902, AW953654, BF203424, AA287665, BF102950, AW089856, BE081349, AI424273, AI337872, W75992, AA039973, AW615357, AA287868, AA040007, AW207183, AW630077, AA844006, AI092051, AA035003, AW374784, W79563, AI095505, AI370765, C05140, AI961895, W92237, BF056098, AI431633, AA011411, AI381447, AA922567, AA688312, AI860011, AI200662, AA676566, H08173, AW590492, BG222429, AI741707, C02948, AA609401, AA427979, AV739012, H29396, AA453991, BE894938, H01836, BG165095, BF333733, W70295, BE242586, N41910, AA054984, R24822, AA156412, BG055899, H48740, H08272, AI241860, BE763810, T63735, R34728, Z42796, BE936536, W88710, AA367891, R36564, Z45070, AA412324, R78131, R56319, AA709055, AA429366, AI915050, AW673132, AL522287, R14984, AA347579, AW023366, AA853400, AA853401, W52589, AA476640, T39346, W88711, AI282590, T29951, AA411419, AA360166, T80320, AA331893, AI754899, AA602993, AA506382, R01609, AA328290, BF808365, N56432, AI832140, AW890834, T31756, R45735, BE929124, AA887981, W31306, BE710919, BE169167, AA039914, BF748450, AW381600, BF352203, AA648132, AI564214, R36407, AW374826, AA383447, T53688, AW198043, AA368172, T53689, N92423, BF237454, AA304402, D79323,</p>

				<p> AI905754, AA319927, AW197916, AW362124, AW579061, AW579502, AW751634, AA054622, BF086800, D25822, BF925479, BG054837, BF904194, BE966011, BE047833, AI432570, BE966787, BE965067, AI244343, AI537244, AV682272, BF904176, AI702343, BE965599, BE963838, BF814761, BE176075, AW366372, AL513693, AI521799, BE964661, AI684164, AI370623, AW020419, AL042365, BE045180, BE965121, AI915201, BF968017, AW813006, AI887775, BF921291, BF990167, AI537677, AI500113, BF812963, BE242668, AI624245, BE967255, BE875243, AI623941, AI927233, N92140, AI621341, BG029399, AI819663, AI698391, AI251221, AA024941, AI570857, AW162194, BG164558, AI250627, BF811808, BE047798, BG104506, AI884459, BF814357, AI439903, AV758455, BE964617, AW078839, AI267185, AL046385, BF813196, AI610357, BG178788, AI831938, AI919547, AI683897, AW117926, BF337896, AI453248, AI620810, AI591228, AL038529, AW129616, AA665587, AW089275, AW079360, AL047854, AW051088, BE408063, AI499483, BF680133, BC003125.1, AK027757.1, AK027877.1, AK027466.1, BC008054.1, AL136916.1, AC090645.1, AK027827.1, AF086408.1, AC090886.1, AC090004.1, AK024538.1, BC006195.1, AF349466.1, AL117457.1, AK026647.1, AC006994.4, AL136767.1, AK025391.1, BC008284.1, AL136786.1, AK025414.1, AL389935.1, AL049938.1, AF245044.1, AL137478.1, AK000655.1, BC003104.1, AL133559.1, BC003614.1, AL390154.1, AL359623.1, X83544.1, AK026762.1, AL137533.1, AL117435.1, AL117648.1, AF114784.1, AK000432.1, L30117.1, AB056420.1, AL133080.1, AB044547.1, AK026494.1, AK026534.1, AL157480.1, AL356859.12, AB060211.1, BC008282.1, AL133016.1, BC003602.1, AL359615.1, AL050155.1, AL049283.1, AL359596.1, BC008075.1, AK025119.1, AC007597.3, AK026550.1, AK026021.1, AL122050.1, S77771.1, AL136862.1, AK027142.1, BC004880.1, BC007248.1, AL080234.1, BC007680.1, AK027868.1, BC001418.2, AK024992.1, AK026164.1, AK025209.1, AK025431.1, BC001873.1, AK027144.1, BC005843.1, AL096744.1, BC008840.1, AL136842.1, BC006287.1, AL080110.1, BC007206.1, BC002539.1, AB050410.1, BC004202.1, AK027146.1, AF126488.1, AF061795.1, AF151685.1, AL353940.1, BC001778.1, BC003052.1, BC001967.1, AK027103.1, AF110640.1, AK026571.1, AK000618.1, AL137529.1, AK026927.1, AB047631.1, AL050277.1, AL137267.1, U88966.1, M86826.1, AL049324.1, AB050533.1, AB048994.1, BC007460.1, AL157464.1, AK025798.1, BC006458.1, AJ012755.1, AL137550.1, AC004200.1, AB060908.1, AL389957.1, AK025349.1, AK000257.1, AB060914.1, S76508.1, AL137294.1, BC006181.1, AF106862.1, BC004292.1, BC009192.1, AB049848.1, X61970.1, AB028451.1, BC003587.1, BC002370.1, AL133081.1, AL110296.1, AL133099.1, BC008788.1, BC001963.1, AL136644.1, X99971.1, AL512719.1, M79462.1, AF111112.1, BC008708.1, AL133104.1, M64349.1, BC005805.1, Y08864.1, BC006509.1, BC008718.1, AK026626.1, AK026613.1, AL512746.1, AL117585.1, AF132730.1, AL583915.1, BC004215.1, BC003122.1, AL136787.1, AL137480.1, AL162004.1, AB063091.1, U77594.1, AK026894.1, AB048953.1, BC000217.1, BC008591.1, AK026590.1, AK026541.1, AF232009.1, AB060857.1, AF094480.1, BC002413.1, BC006207.1, AK024978.1, BC001199.1, U57352.1, AL136864.1, BC000066.1, AL049426.1, AK000653.1, AY034001.1, BC008040.1, </p>
--	--	--	--	---

						AB05290.1, AB049892.1, BC005073.1, BC008364.1, AK000137.1, BC004899.1, AL133640.1, BC000677.1, BC007456.1, AB048954.1, AF218033.1, AB048974.1, AF113222.1, AK025350.1, BC003682.1, BC004310.1, BC002342.1, BC002736.1, AL137656.1, AL133619.1, M80340.1, AK024546.1, BC004368.1, BC007499.1, BC004960.1, AK026865.1, BC008185.1, BC009221.1, AJ001838.1, AK026504.1, AF069506.1, AL080154.1, BC007657.1, BC006410.1, AK026630.1, BC008784.1, AB060917.1, AB055368.1, AF262032.1, AL133062.1, AF260566.1, BC001336.1, BC004119.1, AL050143.1, AF081571.1, AL136586.1, AL080148.1, AF000145.1, AB062750.1, AF227198.1, AL133665.1, BC009294.1, BC002733.1, BC000253.1, AK025383.1, AK026592.1, AK000418.1, BC002809.1, BC001790.1, AK026155.1, AL353957.1, AB047930.1, AK027204.1, BC001964.1, AB048975.1, AB060852. 1.
HDTBP04	144	130774 2	1 - 947	15 - 961		
HDTDQ23	145	130698 4	1 - 2193	15 - 2207		AI872206, BF966561, AW513884, AI912340, BE856991, AI758821, AW337178, BE327923, AW004890, AI572080, BG109128, AW058001, BF342854, AW886887, BF967940, AW474823, BF337371, BF591084, AA775261, BG164538, AA831357, BE087219, AW074361, AI361820, BF696525, AI982775, BF793075, AI690445, AA581345, AU156793, AI917776, D20022, AA825538, BF382552, AI360561, AW439592, AI798286, AI140796, AI277190, AA100279, AA485257, AA835492, AI522238, AW517943, BG035022, AI015234, AA706811, AI469550, BF197859, AI689240, AW265061, AI744762, AW450726, AI884872, BE714642, BE138867, T34498, BF213985, AW769512, BE073192, AA122332, BE138831, BF090537, AI811224, BG167993, BE932894, BF980823, AI355770, AA092467, AI471817, BE904497, BE719958, AI702026, BE171537, BG166879, AI597962, BG180321, BE171499, BF914841, BF967213, BE932875, AI681670, AA089786, BE327680, BE219939, BF032916, AU136610, AI624976, AK001917.1, AF035606.1, U58773. 1.
HDTEK44	146	102542 1	1 - 2056	15 - 2070		AW263031, BF939317, AU158582, BE326883, AI825947, AI674408, AI949058, AI686114, AW236450, AI131456, AI921750, BE646223, AI499386, BF241709, AI744116, H17702, AA968971, BF197318, AI202380, AI612728, AW151821, AA612626, BG010826, AI568798, AI678940, AI868979, BF748934, AW084407, BE075305, AK023814. 1.
HDTEN81	147	571078	1 - 552	15 - 566		AI718421, AI431290, AI332560, AI391465, AI638172, AA507382, AI734920, AA719940, N70479, AI253742, BG059093, AI708198, AI510752, AI637680, AA505271, AI719838, AI707589, AA614722, AI862746, AI830189, AW269501, BE041192, AI471305, AW512571, AW518210, AI708443, AI749344, BG236645, BG059064, AW268642, AI468901, BG059125, BG231197, BG151405, AW877209, AL119457, Z99396, AL119324, AW973213, AW975037, AW973219, AW975954, AW969816, AW975027, BF868697, AW972845, AW861944, AW975002, AW971975, AW974998, AW804686, AW975154, BE705905, AW973230, AW979127, AL119399, AW969680, BF868687, AW969885, AW975692, AW392670, AW979098, AW972292, AW604723, AW975965, AW974801, AW975876, AW979106, AW976031, AW976024, AW975632, AW975032, AW975971, BG153750, AW975966, AW975019, AW975930, AW979090, AW975105, AW975981, BG151745, AW969673,

					<p>AW975244, AW971403, AW975942, AW973750, AW974786, AL119497, AW979002, AW976511, AW979212, AW979294, AW975628, AW979176, AW971326, BE695785, AW975031, AW971968, AW975941, BF868684, AW973717, AW972377, AW976982, AW974658, AW858526, AW975952, AL119443, AW974964, AW979238, AW976023, AW970969, AW858525, AW974823, AW979204, AW971404, AW973209, AW969839, AW975028, AW969643, AW975015, AW969852, AW971732, AW972296, AW979220, AW979219, AW970942, AW384394, AW975990, AW861889, AW979054, AW975020, AW577135, AW372827, AW972880, AW858455, AW974806, AW975434, AW970868, AW972680, AW974785, AW969791, AW969740, AW974802, AW975025, AW971375, AW979173, AW979169, AW974101, AW974338, AW969637, AW974975, BE705903, AW973819, AW363220, BE705906, AW972817, AW969861, AW976000, AW971378, AW975585, AW972154, AW970936, U46341, AW973785, AW973793, AW975963, AW970889, AW975143, AW975230, AW972825, AW973380, AW975074, AW970954, AW973106, AW979134, AW973958, AW973723, AW975134, AW972783, AW979211, AW969769, AW979037, AW969756, AL119418, AW975084, AW604726, AW969757, AL037051, AL036725, AW969843, AW976506, AW975132, AL119363, AW973175, BG059382, AW979162, AW973270, AW970113, AW971387, AW973770, AW972884, AW973189, AW973202, AW972695, AW973805, AW972719, AW976515, AW975976, AW979165, AW976510, AW975975, AW969884, AW975973, AW972943, AW969759, AW979083, BF592735, AW970587, AW973650, AW979175, AW975646, AW969931, AW973986, AW979064, AW975938, AW975016, AW973185, AW975138, AW975968, AW970921, AW969766, AW979116, AW972806, AF086120.1, AB026436. 1.</p>
HDTFE17	148	104339 1	1 - 1228	15 - 1242	<p>BE273962, AW675159, AA621888, AA621871, AW748710, BE151868, BE151889, BE151869, BE151849, BE151872, BE151870, BE151871, BE151873, BE151864, BE151839, BE151843, BE151866, BE151846, BE151874, BE151850, BE151861, BE151882, BE151862, BE151890, BE151845, BE151844, BE151885, BE151854, BE151841, AW748711, BE151847, BE151865, BE151886, BE151969, BE151887, AW748719, BE151842, BE151883, BE151963, BF350425, BE151880, BE151851, BE151968, AW748716, BE151904, BE151853, BF350436, BE151840, BE151905, BE151907, BE151884, AW748723, BE151901, BE151974, BE151966, BE151964, BE151848, BE151912, BE151897, BE151888, BE151902, BE151896, T56553, BF350423, BF350431, BF378245, BF350424, BE151979, BE151987, BE151913, BE151908, BE151911, BF350422, BF350432, BE151852, BF350429, BE151900, BE151970, AW374334, BF350430, BE151899, BE151881, BF350438, BE151973, BE151914, AW087213, T08905, A1652677, A1673648, AW246689, BE151978, BF3535903, A1655004, AW250829, AW672991, BE151962, BE151977, BE151967, AW170222, A1140471, BE151910, R94667, A149673, AW183216, BF345144, BE151976, AW189831, BE151975, AA612723, BE151903, BF350418, A149754, BF312447, AL517947, AF276889.1, AF196972.1, AL136967.5, D82352.1, W35383, AA015734, AA015831, AA018179, AA020824, AA020847, AA021564, AA021617, AA088190, AA088363, AA261917, AA262421, AA418866, AA426526, AA430530, AA613360, AA573487, AA577277, AA761384, AA831386,</p>

					AA864866, AA902924, AA922543, AA934011, AI052766, AA481843, AA481990, AA433981, AA844171, AI004425, AI033046, AI073848, AI087207, AI088106, AI093860, Z38440, Z42185, AA683532, AI272861, AI285507, AI301768, AI343925, AI351185, AI356409, AI359625, AI479005, AI569081, AI582503, AI147150, AI623660, AI184904, AI193793, AI264308, AI273503, AI587448, AI351022, AI622302, AI621103, AI670930, AI698414, AI701275, AI801704, AI868864, AI888089, AI916106, AI949047, AI963403, AI970843, AI989788, AW073000, AW132028, AW196624, AW207687, AW193329, AW511737, AW590114, AW590183.
HDTGC73	149	635457	1 - 698	15 - 712	AW022607, AW511178, AI140427, AI971228, AI373655, AI580779, AI369886, AI190934, H40803, AI243231, AA453827, AA453746, BF446909, BE326968, AA961079, AA040716, N47998, AI819706, T56239, H39994, BE670797, AI749775, T56381, H43297, BE464767, AA988630, AA974652, AA442300, BE327694, C01257, R49917, F34030, RI7933, AA987718, AW440024, AI018768, BF942310, BF446776, AI240357, AI400446, N24874, N78913, AI694117, AI002282, R49918, AI685705, BF942188, BF942316, AI972263, AA437235, AI498099, H39563, BF964549, H43296, T47759, AW900854, AA968952, BE887988, N51205, T47760, AW779345, AA040717, AI873997, R18029, AA933016, BF885380, AI687282, AL096888. 30.
HDTIT10	150	839264	1 - 1186	15 - 1200	AI083677, BE743996, BE743947, AU160678, AW664068, BE349558, AW628596, AI571248, BE855557, AI074410, AI187067, AI570161, AI369658, AI911489, AA847560, AI858954, BF061712, AI633548, AI797227, AW131565, AA740410, AI523334, AI016601, AI381898, AA456612, AA044598, AA059399, AI459164, AI090345, N35134, BG222539, AW167314, AW573046, AW189552, AA909759, AA937341, AA507905, AA029634, AA402030, AA857843, H50249, AI040383, AI457950, AI017968, H49423, AA761742, AI024077, BF056436, AA454713, H41354, R53884, AI808070, AA983678, AA402973, AA757454, R89047, AA814131, H46258, AA503217, AA621290, AA484401, BF447031, R67742, AA805632, AW163079, R50125, R82044, AI948622, AA484466, AI356460, AI095617, AI910985, BF510966, H27862, H43711, AA935660, AA604173, BE139470, AA868478, AI468101, AA317664, AA554872, AI582858, R90731, H51590, AI243984, H43799, AI399885, AV697638, AA662796, AI417135, R53883, AI400568, AI298084, AI216579, AI399848, AA973892, AA455791, AI937339, AI147045, AA132122, AI809110, AA132019, AI824141, W69465, N32856, W73351, AA993580, AW518179, AI026644, AA828309, AI934497, AA622497, AA524758, BG152377, AA029064, AI571725, AV695520, AA029168, H41046, BE844032, AI566678, AA863413, N41809, W73471, AV697639, AI245117, AI524611, BE041443, AA877127, AA876431, R07464, AW303296, AA761499, N58964, Z19469, H41261, AW193802, AI972555, R00241, R66131, R87416, BE798222, BE790927, AV744175, AI168456, AI025988, BE799623, BE790659, AI362716, AA805362, F00403, AI498734, AI088547, BE790553, AA988398, BE792056, BE903078, BE734036, BF003146, BF953534, BE795218, AA401590, AA058850, AA400077, AA454762, AI568737, D45613, BF183343, F22545, BF317353, BE793747, AA620552, R07463, BE902702, BF316315, BG104176, BG104243, AI889953, AI857296, AI468872, AI829327, AW073994, AI955866, AI520809, BG256090, AW190042, AW073697, AI538085, AI500077, AI628217, AI439745, AW198075, AL040243,

AI88501, AI564749, AW169604, AI802240, AI433976, BF343172, AI888671, AA916133, AI862144, AI932638, AI869367, BE048098, AI564247, AW983824, AI274745, H89138, AI916419, BF792469, AW268122, AW167918, AI554821, AI470651, AW105601, AI610362, BG166654, AI921433, AI813579, AI802833, BG029829, AI269862, AI811811, AI564259, AI783792, AI812015, AI270183, AI624604, AW169634, AI540832, AI567612, AI435631, BF312182, AI648663, AI570781, AI624548, BG257525, N71180, AW169653, AI287326, AW081797, AI620075, AI890628, BF724157, AI431424, AW075522, AI680498, AI554344, AK024058.1, AB058766.1, AL136799.1, AK026597.1, AK024538.1, AL137557.1, AK026865.1, AK027113.1, BC008070.1, AL117460.1, AK000212.1, AL137463.1, AF207829.1, AF090934.1, AK025906.1, AK026504.1, AL137459.1, AL122049.1, AL359615.1, BC003683.1, BC005678.1, BC007198.1, U80742.1, BC008893.1, AL162083.1, AL133014.1, AB019565.1, AK000652.1, AB056427.1, BC005151.1, AB055366.1, AL137271.1, BC006412.1, AL136749.1, AL137550.1, BC008899.1, AK026959.1, AL136786.1, AB056420.1, AL136635.1, AL136845.1, AL389982.1, BC008417.1, AB048919.1, AK026164.1, AB047801.1, AB060839.1, AL136805.1, BC008780.1, AK026629.1, AL162008.1, AL389978.1, AK000137.1, AL049464.1, AK026593.1, S61953.1, Y16645.1, AB048964.1, AF218031.1, AK026353.1, AB047904.1, AK000432.1, AL137560.1, AK026651.1, AL512746.1, AL512689.1, AL136768.1, AK026532.1, AL157431.1, AL136586.1, BC008983.1, X72889.1, BC008382.1, AL359941.1, AK026464.1, AL050149.1, BC003684.1, AL442082.1, AL080124.1, AL122110.1, AF218014.1, AK026642.1, AB060825.1, AL359601.1, AB049758.1, AF260566.1, AF090901.1, AF057300.1, AF057299.1, BC008280.1, AK026947.1, AB048974.1, AB062938.1, AL110221.1, AL133075.1, AL110225.1, AL136892.1, BC009033.1, AL359583.1, AL359618.1, AK025084.1, AL136844.1, AK026608.1, AL050277.1, AL442072.1, AL050138.1, AL137476.1, AK026592.1, AL049314.1, AY034001.1, AF183393.1, AL133557.1, AF242525.1, AL389939.1, AK000391.1, AL359620.1, AK026534.1, U91329.1, AF090943.1, AK025391.1, AK026583.1, AL512733.1, AB055361.1, AJ242859.1, AL122098.1, AB063079.1, AK026855.1, AL050116.1, AF125949.1, AL117394.1, AF056191.1, AL050393.1, AK026533.1, AK027114.1, AK000445.1, AB047887.1, BC004951.1, BC003687.1, AK025092.1, AF111847.1, AL117440.1, AK025484.1, AL512765.1, BC008488.1, BC008365.1, AL136787.1, AF104032.1, AL512718.1, AK024524.1, AB051158.1, AL049452.1, AL080074.1, AL080127.1, AL136893.1, AB052200.1, AF125948.1, AL353940.1, AL080137.1, AL122093.1, AB056768.1, AK027204.1, AJ012755.1, AF078844.1, AL080060.1, BC000090.1, AL133104.1, AL136928.1, AK026526.1, BC002839.1, AB063070.1, AL122050.1, AK026542.1, BC006164.1, AK026045.1, AF225424.1, U58996.2, AK025958.1, AL110197.1, AK025209.1, AB060908.1, AB060916.1, AB060929.1, AK025491.1, BC002733.1, AL117585.1, AL136843.1, AK025573.1, AF219137.1, AK000753.1, AK026408.1, AK000618.1, AL049466.1, AB055315.1, BC005890.1, AB062942.1, AL080159.1, AL390154.1, BC004370.1, BC005168.1, AB056421.1, Z82022.1, AL133098.1, AK000083.1, BC006807.1, BC003122.1, BC007199.1, AL110280.1, AL162002.1, AF026816.2, AF091084.1, BC007326.1, AF003737.1, AL137556.1, AF097996.1, AK025967.1, AB050510.1,				
--	--	--	--	--

						BC001967.1, AB060863.1, AB063046.1, AL137648.1, AB048954.1, AK027182.1, BC001963.1, AK027213.1, BC001045.1, AK027164.1, AK027160.1, AK025798.1, BC003548.1, AL050146.1, AL136864.1, AB060214.1, BC009341.1, U42766.1, AL133606.1, AL122123.1, AF230496.1, AB060912.1, AF353396.1, BC008284.1, AK026647.1, AF051325.1, AL133640.1, AK027193.1, AK027116.1, AB063084.1, AB055303.1, AB060887.1, AK025312.1, AF061943.1.
HDTMK50	151	101148 5	1 - 1338	15 - 1352		AI862716, AV740009, BF681619, BF814446, AW955693, AI004591, AI754653, BF941382, AI040051, AW438542, BF984807, AW029515, AA582554, BE393367, AA579179, AA720732, AI733856, AU152964, AA584489, AA528390, AA602557, AL038936, BE019467, AW328331, AV721886, AV726332, BG222269, AW500029, BE294700, AW188662, AI037897, AA171941, AA503298, AI753037, AA535216, BF725844, AI366902, BE676915, AW575605, AL040054, AU152561, AA410788, AW976010, AW512196, AA584148, AI921765, AV764259, AI809818, AW970970, AV685117, AW515437, BF934301, AA121777, AW402458, AA804726, AI566408, AA812684, AW271904, AU118200, AI601229, AU156313, AI689198, BE156426, AV701116, BG222875, AV687683, AV685479, AI818332, AW963444, AI653776, AI292236, AV651051, AW407578, BF871476, AA644090, AW900516, AI628219, AU147341, AI963856, H79633, BE674952, R91911, AF312915.1, AL157838.24, AL161792.29, Z98200.8, AL133448.4, AL133371.3, AL161904.7, AL353668.18, AL161626.20, AP000247.1, AC005726.1, AC073073.2, AC007207.22, AL022324.1, AL445685.17, AC004212.1, AP000047.1, AL359091.10, AL162377.10, AP000115.1, AC006312.8, AL357515.26, AC003029.2, AL162272.10, AL050335.32, AC002544.1, AC002301.1, AC005332.1, AL132713.11, AL139100.9, AC020983.7, AC004847.3, AC009331.5, AL030996.1, AC010489.4, AC008771.4, AC004491.1, AP000925.5, AC005041.2, Z82206.1, AC007097.4, AL133163.2, AL022323.7, AC002039.1, AC004832.3, AL157369.7, AL161775.20, AL161421.11, AC006539.1, AL359839.4, AL157823.9, AL450325.5, AC024028.10, AC034193.4, AC012170.6, AP001711.1, AL358334.3, AC018808.4, AL035530.11, AC005043.2, AC022116.5, AL391868.15, AP000504.1, Z93241.11, AP001710.1, AC004859.2, AL161779.32, AL162505.20, AL445222.9, AC006165.1, AC007022.2, AL133500.3, AC011484.4, AC027319.5, AC005399.19, AC006435.7, U91326.1, AL390294.19, AC002073.1, AF003626.1, AC020552.4, AL138976.5, AP001725.1, AL022313.1, AC005518.2, AL138880.14, AC005057.2, AC018828.3, AC004019.20, AC021036.5, AC010320.9, AF129756.1, AC022383.3, AL034405.16, AL121905.23, AL021155.1, AC007956.5, AL590762.1, AC006511.5, AC002306.1, AL139809.16, AL354808.24, AB023051.1, AL135928.6, AC002476.1, AC005519.3, AC004590.1, AC012384.16, AC005620.1, AC006581.16, AL096819.17, AP001873.3, AP000208.1, AP000130.1, AL138741.13, AL078581.11, AC009086.5, AL109806.22, AL079335.29, AL117382.28, AL022100.13, Z84480.1, AF001549.1, AL590763.1, AC073520.6, AC004707.1, AP001717.1, AF312032.1, AC002045.1, AL139095.15, AL133411.8, AC007050.25, AL355803.15, U82671.3, AL360227.17, AC004687.1, AL021546.1, AC008755.6, AC011311.11, AC009312.4, AC008747.5, AL022721.1, AF196779.1, AL139322.13, AC020898.5, AC008379.6, Z69653.1, AL121972.17, AC011480.3, AC005013.1, AP000512.1, AC011487.5, AC010359.5, AC011895.4,

					AC008397.7, AC005484.2, Z83826.12, AL390736.6, AC007676.19, AL049757.14, AL353748.13, Y18000.1, AC002996.1, AC007405.6, AF084941.1, AL390074.17, AL591770.1, AC016025.12, AC005520.2, AL121891.22, AC016776.6, AC011497.6, Z85986.1, AL135932.7, AC073347.3, AL023577.1, AC083863.2, AL163283.2, AC020754.4, AC073138.3, AC011005.7, AC011998.8, AC003982.1, AC011448.3, AC010651.7, AC003043.1, AL121992.24, AC044797.5, AC016620.6, AL035587.5, AL096841.6, AC011479.6, AC005874.3, AF134471.1, AL079340.7, AC006241.1, AL355305.9, AL031772.6, AL357519.19, AC002546.1, AC016697.8, AC005756.1, AF002993.1, AL078461.38, AL117672.5, AC018764.6, AC008762.6, AC005666.1, AL158821.16, AL132640.4, AC004854.2, AF196972.1, L78810.1, AC005300.10, AL158141.14, AC006344.2, AC003086.1, AC018511.4, AC010328.4, AC004851.2, AC005358.1, AC005839.1, AC006480.3, AC040163.3, AL096712.20, AC067941.7, AP000122.1, AC006285.11, AL031847.17, AC005378.2, AL442203.12, AL360294.11, AL136313.27, AC005513.1, Z97352.1, AC005529.7, AC006483.3, AC004890.2, AC011465.4, AL139082.18, AC009779.18, M87914.1, AC068811.8, AL031289.1, AC020906.6, AC011489.6, AL020997.1, AL121781. 38.
HE2DY70	152	722217	1 - 625	15 - 639	AI983739, AI093491, BE464707, AA169811, AA232650, AA609946, AW023590, AW163464, BG260037, AW087445, AL515047, BE785868, BF680131, BE045182, BG257535, AI344817, AV712673, AW071417, BG179993, BG110517, AI345746, AI251205, AA830821, AV725055, BF726237, BF342070, BF792961, AI308032, BF344652, AL514129, AV711509, AV715560, AI802542, BE964614, AL079963, BG163618, BF726183, AI969641, BF970731, BG164371, BE910703, BF037097, BG104782, AW827289, AW103371, AL120853, AL110306, BF885081, AI929108, BE964876, AI815855, BF904180, BF856052, BE965432, BF792469, AI340603, AL514529, AL514357, BG035511, AI521012, AL036802, AI344785, AV681719, AI590120, BE966643, AW935969, BF793309, AV682051, BE047852, BE620084, AI620517, BF341801, BF969494, AA225339, AI909666, AL043981, AL037454, BG109221, BG109270, BE874133, BG110684, BG120816, BF904258, AA427700, BE018334, AV654624, AV764282, BE965014, BG036846, BE048071, AI364788, BE789764, AI619502, BE964497, BF816811, AV706744, BF970768, AV703585, AL119863, BF526407, BF037484, AV660662, AI537677, BG168549, AW082594, BG180996, AI627880, AI471361, AV764180, AL080046, AI569583, AI400725, AW999049, BG261093, BF526020, BG121222, BF133418, AW026882, AI866741, AI536685, BF527014, BF812938, AL036804, AV682289, AI623682, AW268220, AV714485, BE964593, AI349645, BE905394, BE619280, AI433976, AL119791, AV686346, AI497733, AI433157, BE964460, AI619716, AW167222, AI702073, BF910810, BG180046, AV764059, BF812961, BF812960, AA640779, BF344691, AW978080, BG179633, AI348897, AL045500, AI699865, AA572758, BE964636, BG114104, BF921291, AW075305, AI612913, AL041772, AL513943, BE965621, AI340519, BG058398, AI921248, BE965481, BE904902, BE891101, AL121270, AI9222901, AI282326, BF904265, BG249582, BG252914, BG105099, BF885675, AI783504, AA814407, BE879906, AI620284, AV681647, AI358701, BE965067, BG168185, AW087901, AW238730, BG168696, AV733470,

HE2EB74	153	513662	1 - 1420	15 - 1434	AL133104.1, AK027114.1, AL049938.1, AB048964.1, AL050024.1, AK025484.1, AF177336.1, AF210052.1, AL136843.1, AK025573.1, AL157482.1, AL136845.1, AK000718.1, BC005678.1, AL137476.1, AL122123.1, AB055366.1, X82434.1, AL049300.1, AL137550.1, AK026642.1, AK000137.1, AK026885.1, AL133568.1, AL117394.1, BC006195.1, AB048974.1, AK027200.1, AF125948.1, AF162270.1, AF271350.1, X72889.1, AK026464.1, AK026353.1, AF132676.1, AK026542.1, AF061836.1, AK000212.1, AL512719.1, AB063079. 1.
HE2EN04	154	545008	1 - 356	15 - 370	BF431622, AL035942, AW500190, AW889139, AA136080, AW304923, AL035941, AA491000, AW002842, AA992811, AA747222, AW189910, AW026264, AA679646, AA953459, BF910533, BG179993, AW162118, BE408392, AA505898, AV682249, BF982063, AL049442.1, AL122116.1, AK025435.1, AL110223. 1.
HE2FV03	155	396139	1 - 2053	15 - 2067	AW001928, AW079751, AW073814, AL754638, BG250988, AI884973, AI571035, AW440401, AW082774, AI888810, AW166812, AI250234, AA292765, AA883763, AA706968, AI375629, AW470061, AI367655, AI816708, AA866114, AA706948, N66757, AW103401, AI023713, H99221, AA143778, AA969210, W90744, AA877946, AI289492, AI446437, AI520961, AA604695, AW409669, AW770358, BF220234, AV660129, AA573448, BF698763, AA564001, BC000411.1, AF067656. 1.
HE2NV57	156	740750	1 - 853	15 - 867	AL043591, AV726971, AA127856, BE503097, AI879075, AA917899, AI240219, AW958109, AW958106, BE221298, AI761889, AI042518, AW160850, AI750090, W38699, AW157481, AW161163, AA132116, AI565447, AW151293, BE890471, N94930, AI922328, BF476776, AI650737, BF668030, AA030052, AA907159, AW163661, AA127886, R26504, AW160606, R26476, Z33583, AA83553, AA922649, AA974552, AA029940, Z39533, AI700171, AA450258, AW472819, BF445592, AI572746, T30697, T31442, AA568420, AV748357, N5856, AA095728, AW952127, T36214, H89692, F04756, Z44852, C16580, AI873861, N71935, R40796, D62931, AA091396, F06009, F06010, BF927136, AA579325, AW663027, N56262, H89758, AL161449.7, AJ001319.1, AF093419. 1.
HE2NV57	156	740750	1 - 853	15 - 867	C05927, R72949, AA327984, AC084730.2, AC016673.5, AC004929.2, AC016716.6, AC008066.4, AC003969.1, AC024082.6, AC002302.1, AC013246.13, AC011490.7, AL158064.16, AC084729.2, AC078851.4, Z98743.1, AC020610.6, AF195953.1, AC016910.5, AL359394.9, AC005227.2, AC003692.1, AC016776.6, AC002300.1, AL451107.6, AL157838.24, AL031737.2, AL050335.32, AC007690.11, AC004541.1, AL022401.1, AC018796.4, AL358913.4, AL008583.1, AC005868.1, AL133383.10, AC006070.1, AC006211.1, AL359680.4, AL158035.14, AC087072.2, AC009424.2, AL391686.10, AP001684.1, AC006013.3, AL356461.15, AC016598.5, AP002980.2, AL158817.11, AL035685.21, AC034251.5, AC006134.1, AC020906.6, AL391241.21, AC015983.7, AP003470.2, AP001889.4, AL357519.19, AC087430.2, AC005081.3, AC005886.2, AC018509.5, AF277315.3, AC010913.9, AB020875.1, AJ011930.1, AL163300.2, AP000952.2, AL133387.8, AP000953.2, AL162503.12, AC025765.5, AP002342.3, AL445232.5, AC023114.5, AC004891.1, AL355792.8, AL163280.2, AL109662.3, AC010206.8, AL049843.18, AC017076.14, AC009362.8, AC005015.2, AL096791.12, AC002487.1, AC010726.4, AL353752.6, AP002846.2, AC005344.1, AC022363.24,

HE2PD49	157	638617	1 - 1408	15 - 1422	AC009498.3, AP001699.1, AL138976.5, AC008064.2, AL357507.9, AP001670.1, AL137061.1, 12. AI143226, BF792579, BE798123, BG027947, BF512811, AW960702, AA074614, AW973179, BF793801, BF970034, AI816250, AI336874, AI359462, BF196595, AI920941, BF683421, AW404001, AA041535, AI619673, AW080448, AA312966, AI248170, AA552215, AI864909, AI161255, AW027101, BE393360, AA613058, AA953791, R54079, R60168, AA426568, AI697713, BF208847, AA082536, AI269146, AA989378, H21497, AA877154, H98486, AI206064, BE563486, AI582707, AI587399, BF677141, BE396204, AI144140, AA527643, AI282213, BE832689, AW574900, AA376459, H29536, AI200580, AA329522, AW662882, BF213405, AI927727, AA318044, AI263946, AA039912, AI223111, AI912507, AI829375, R49273, BF842875, AA091789, F36491, N40052, R39339, AI557366, T24757, R43134, AA425093, AA873687, AI816330, AI266123, AW361339, R60167, AW996248, AI872739, AI561274, BE714945, BE714961, N31309, F31801, R17888, BF904855, H29628, BG119615, D26032, C00043, N27118, AI005232, AI052315, AA301581, N22922, H39166, BC004878.1, AF353991. 1.
HE2PY40	158	753229	1 - 1274	15 - 1288	AA330504, AC000397.1, AF100978.1, X84749.1, AF170890.1, AF100973.1, AF100970.1, AF100962.1, J05175.1, AF134415.1, AF134412.1, AF134413.1, AF134414.1, AF021846.1, AF071831.1, AF134416. 1.
HE6EU50	159	411998	1 - 1138	15 - 1152	AA702142, AI078434, AA069425, R10241, W86987, AI902844, R10745, R10723, AA069424, AI902901.
HE8DS15	160	847060	1 - 2185	15 - 2199	AV725650, BE161426, AW130367, BF343057, AA127680, BF575221, AI096437, BF941499, W58383, AI161240, N95226, AW966449, AI356752, AI093508, AI057144, AA044288, AW130361, AI423547, AI221152, AI094774, H47283, AI352542, AI891136, AI002491, T53270, AA044116, R48378, R24320, AV658066, AI829703, AI819388, BE140169, Z44849, R16574, T39273, AA095159, Z25099, AW273857, R16633, AA384077, AI245095, AW026140, T93764, BE927909, N73937, AW118768, AA121543, AA995178, AI453845, AA703455, AI452494, AW044037, H40993, R48277, AW629019, T64039, AA904647, AW073189, W21055, AW263913, AI096938, Z28777, W03697, AW797518, AI039546, AI434419, AW050649, BG003285, AI240412, AA886341, H23905, AI695284, AI767991, H47284, AI309041, BE927916, AA724059, AI352281, AI584012, AA618131, AA357401, AI796309, BE936061, AB018301.1, AL096772. 5.
HE8MH91	161	589450	1 - 1747	15 - 1761	BF969305, BF059262, BF434869, AI761909, AW137210, AI283077, AI625814, AA910871, BF028374, AU145480, AW103833, AW978231, AA179892, BG111607, AI751270, AU157325, BF970781, AA169699, AI818898, AA169226, AA180424, AA744012, AA806038, AU153225, BF445787, AA630387, AI185702, AU119050, R69144, AA282527, R69260, AA332623, AI625888, AA282635, AA968997, AA744320, AA044588, AW513757, AI196702, BE089435, BF154666, AA248976, AA720672, AK023183.1, AK000289.1, AB055279.1, AK002033. 1.
HE8QV67	162	105007 6	1 - 1985	15 - 1999	BG119583, BE746475, BE745466, BF309488, AI361796, BG170779, BF966754, AW958421, BE617929, BG113523, BE394923, BE858188, BE731439, AA555135, AA236263, AW958336, AV752251, BE222593, BE797087, AI378612, AI634494, AA742437, AI199786, AV752842, AI669796,

					<p>AW571509, AA063366, AI291989, AW004941, BE208151, AV704111, AI871167, AI540336, AA641240, AI288465, AA995997, AI218558, AW803217, AI083642, BF310733, AI435447, AW000866, BF934819, AV702400, N58967, AA136332, AA401608, BF433811, BE044647, AA868416, AW249910, AW627730, AA070405, BE908878, AA805715, BE717281, AA731211, AA844218, BE829627, AA725610, AA401477, BE829527, AI299157, AA648375, AA670304, AA709453, AA283820, AA970204, AW771046, AW249690, AA235005, AI928576, BE829555, BE829559, AW780342, AI017819, BE829626, H72154, AI750471, BE767520, AI571553, AI493322, R49561, AA875884, T70282, AA621993, T92727, AW469575, AI081826, AW449174, AI917238, N99124, BE836842, AA354609, W81566, AI033218, AI357261, AW104863, AV707204, AI445295, W81613, AI983491, BE717246, T08002, AA890368, AV707554, T03334, BE717260, BE836791, H72067, AI359915, BE836784, AW166060, BF834444, AA393274, BE836790, AW949521, AA736679, AA760993, AI085191, AW079503, T91829, AA136418, AA844211, AA725212, AA398623, H72162, BF590157, BE717249, BE717270, AA309678, BE829551, AI301810, BE717253, BE717247, AI500601, BE829537, W96196, AI200943, BF343587, T81071, N57909, AI419052, AI672790, H43667, BE829547, AA721731, AV708653, AI581665, AI208088, R60516, T35798, AW997309, T09191, T92806, BE717235, BE717244, H44738, R44088, AV685266, R30891, AA223393, BE791873, T32074, AW958289, BE000527, BF002298, AW080583, R30822, D80992, AI453195, AI937049, AI004756, AA446567, AI077535, AI291831, AA490386, AW581226, T16726, AI445223, AW074198, T81236, BE702357, AA988970, F13762, T32218, AA932644, BE717232, AA096082, AI351030, BE762886, AI611828, W96071, AA330722, BE908528, BF084648, BE699273, AA428987, BE019772, AW151622, AI400847, AI799907, BE646085, R37736, AI597679, T34475, AI885091, BE966358, BE717241, BE699278, AA707288, AW580306, T81023, AI825339, AV698582, BE164999, R13905, AA429119, AI160361, T08003, BE829526, BE829579, BE793734, AI133410.31, AB046825.1, AK027884.1, AF258662.1, AF211847.1, U59629.1, AF211848.1, AF009368. 1.</p>
HE9BK23	163	675382	1 - 1622	15 - 1636	<p>AW299658, AV659209, AW058550, AI796131, AW299514, AV658836, AV653227, AV654722, AV682016, AI767984, AV647576, AV649623, AW614624, AI634858, AW235128, AI498692, AV649245, AV693284, AV659141, AI373251, AV653105, AV658636, AV688654, AI796532, AV657125, R86161, AV647536, AV647454, AV660968, AV654145, AV684193, AV659149, BE971322, AW295829, T73510, T73442, AV699707, AV685476, BF740041, N71226, AV726104, C15737, AV706064, AV706545, AV702961, AW962458, AV703159, AF152562. 1.</p>
HE9CP41	164	560625	1 - 1378	15 - 1392	<p>BF032830, AL121944.14, AL138700.18, AL132988.4, AL138805.8, AC018695.6, AC005305.1, AC015853.8, AL049637.43, AC005536. 2.</p>
HE9DG49	165	129993 5	1 - 703	15 - 717	<p>BF508798, AI829099, N25625, AI126506, AI200037, AI128843, AW024969, N34223, AW450603, AA743134, N36303, AW020616, AI217597, AA605122, AI160533, AA729493, AA568193, BE857354, AA568681, AI695490, BE855663, BG054946, N26904, N24885, W52651, AI802647, AI312534, AA648514, N72137, N35103, AA806507, AA729125, N34254, AI219599, H86995, N39790, R73200, N26781, AI032141, N25653, H86994, W00385, R73137, AW298649, AA296449, N28403, R26304,</p>

						AW452862, AW453038, AI299683, AA988539, AI141901, W52017, AI039557, AW236299, AW515490, AI361669, AI674252, AA768761, AI452444, AW629545, AI984739, AW074182, AW583163, T25829, AI805445, N20053, BF958127, BF964329, AA543074, BE081422, T25828, AA358828, BE152130, AA653691, AI362330, AW606102, BE170656, AF238079. 1.
HE9HY07	166	420063	1 - 818	15 - 832		
HE9NN84	167	846309	1 - 720	15 - 734		AA595746, AI675996, AA421107, BE467349, BF591596, AI760653, AI676145, AI937171, AL048289, AA142958, AV757675, AA211421, N20332, AL048288, AA211732, AI168158, AA150469, BF439049, R70617, AA114851, N20324, AW971316, AA525099, AA527928, AI022578, R49331, AA114852, AI879609, AI350105, AW271678, AA397997, AA400333, AA449237, H10050, AA987243, AA400158, AI632706, Z19420, F00068, H97392, D54580, AI273157, BE220088, BF195338, AW297795, R49240, BF672343, BE327708, AA903792, BE833437, BF681090, BE467754, AW022151, C16456, D55902, F00315, R39349, AI500072, AI919009, Z25269, C01892, N27598, BG026508, D51002, R70518, BF195496, H00776, AF070533.1, AF283527. 1.
HE9OW20	168	135233 7	1 - 1195	15 - 1209		BE738133, AA223584, AU152161, AW297936, BE242781, AU130144, H54044, BE154665, AI312278.1, AC046130.25, AK027657.1, AK023061. 1.
HE9RM63	169	886167	1 - 2135	15 - 2149		AUI33294, AI057619, AI815558, BF949735, AW272417, AI631144, AI083492, BF696663, N53095, AI922624, AI016358, AI791895, AW439093, AA377170, AW238991, AV733682, AI634595, AI280306, AA326937, AI816503, AK001735.1, AF227906.2, AL162500.15, AL158192.15, AL133051. 1.
HEAAR07	170	561524	1 - 1070	15 - 1084		BF035327, AI436352, AW903499, BF839884, AV731158, U49973.1, AL136168.4, AC018719.4, AC010386.5, AC026463.4, AL356859.12, AC025097.41, AC010485.5, AC006343.2, AF222856.1, AF222854.1, AF042484.1, AF222855.1, AC005728.1, AC012081.16, AF241734.1, AL158201.19, AC022392.4, AL118557.5, AP002500.4, AL031671.12, Z82975.1, AL139182.24, AP001533.4, AC005317.1, Z98745.1, AC079319.19, AC005411.1, AC004941.2, AL445204.3, AC006566.2, AC005678.1, AL357394.11, AL356094.11, AL356534.12, AL359703.13, AP000893. 5.
HEBAE88	171	526417	1 - 568	15 - 582		AI732427, BF445282, AA129395, AW880236, AA065052, AC004478.1, AC004388.1, AC010722.2, AC007511.8, AL450333.13, Y08991. 1.
HEBBN36	172	486120	1 - 1032	15 - 1046		AW965787, AA426185, BE669482, BE504215, AI823764, AA400753, AW183532, AA099541, AW994875, BF131705, AA676425, AW450178, BE835748, AA693746, AI168628, R26928, BF331783, AA356625, BG150194, AA954744, AA903008, R26705, BE138808, BE019804, AC005180. 2.
HEBCM63	173	484643	1 - 544	15 - 558		AW138816, AI907676, AI360241, AW341219, AI360299, BF477880, AL119663, BF928245, Z38680, AI937380, AI557264, AA170832, AV741220, AV745417, AI524890, C15120, C15762, D52835, AV705545, AI525431, D53447, AI541374, D53472, AV746010, AW965902, AW954735, AV684168, AV726916, AI546891, AV661866, AV702189, AI525306, AV707931, D61254, AI541307, AB023144.2, AL050253.1, AB041736.1, AL023513.1, AL035545.1, AL078460. 6.
HEBEJ18	174	701802	1 - 671	15 - 685		BG119433, BG248347, BG109710, BE383397, BF310661, BF035847, BG111960, BE740887, AA872710, AW051637, BE904996, BE620053, BE294553, BG026514, BF036166, BE378983,

					<p>AV716604, AI300158, AV710056, BE257692, AW778814, BE879729, BE258999, AW592818, BE261359, AA044747, AA044799, AA878925, AI921790, AI469932, AA947927, BE251176, AA058505, BF245674, AA934688, BF310228, BE567185, AI299177, BF312584, BF243996, W38688, AI453622, AW749554, W95793, AI277337, BE271728, AA903577, AW874395, AI309289, AV712772, AI085685, AW118921, W95680, AI948425, AA934482, AI303007, AW601910, AI419931, BE440006, AW342036, AA053139, AW291750, N92290, AA962740, AW749576, AW954824, AV737047, AA055227, AV713230, AW749583, BF304421, T87073, AI371426, AV756120, AV681938, BE794262, AI143381, AI097662, BE258966, AA037518, N25835, AA912713, H71267, W80906, W80813, AA315305, AW374030, AW300889, AW300782, BF909052, AA037362, AI247237, BF336991, AA657605, AA541343, AA878777, W24468, T81887, AA054464, AW374000, BF216378, AI016169, AW374003, AA055226, AA213429, AW384982, BE067202, D20873, AI831636, AI038897, AW795930, BE327096, W31033, BF036705, W86895, BF792783, BF513528, T87074, AI361634, AI311824, BG036220, AW302965, AI307446, AI345737, AI345736, AV735576, AI345666, AI335476, BC000573.1, AK024569.1, AL136930.1, AL590002.7, AB060912.1, AL136754.1, BC008485.1, AL137294.1, AK024978.1, AL137459.1, AK000718.1, AF155827.1, AL117460.1, X72889.1, AL389939.1, AL080156.1, BC003104.1, AK000445.1, AK025632.1, AK000323.1, AB056421.1, AL080148.1, AL133104.1, BC007920.1, AL136747.1, BC006458.1, X86693.1, AL137523.1, AK026408.1, BC004951.1, AL050172.1, AL122098.1, BC008649.1, AK026642.1, AK025209.1, AB046642.1, AK025312.1, S77771.1, BC000725.1, AF002985.1, BC006119.1, BC008387.1, AL512746.1.</p>
HEEAG23	175	684254	1 - 1655	15 - 1669	<p>BF667852, AW798053, BG141339, AI279852, BG141348, H57654, AI472339, H85172, BF879975, BF879989, BF879974, AW954063, AW994019, BF590284, AA383569, H96534, BF800241, AA903404, AW873530, AA719530, AI084916, AW135894, AA993772, BF358415, AA890589, BG249829, W61170, AA807443, AW498471, AA814409, BG149771, AI828884, BE839816, BF954921, R76166, BE545018, AA470533, BF922076, AI829062, BE766575, BF808213, AA737653, H96878, R62923, AA714658, BF808212, AA705115, AI964064, AA569749, AI343340, AC004938.2, AL357033.19, AL121808.4, AL135749.3, AL359402.3, AC009314.4, AL031777.4, AL035079.14, AC078818.19, AL358612.8, AC018644.6, AL391839.9, AC013716.6, AC004882.2, AL078591.18, AL078645.31, AL031680.20, AL162505.20, AP001715.1, AC025264.16, AL109938.8, AC006312.8, AF243527.1, AL133367.4, AC010319.7, AC083875.1, AL050349.27, AL162615.13, AL356575.8, AP000223.1, AL121578.1, AC084732.1, AC005033.1, AC005082.3, AL136162.17, AC027319.5, AC062020.5, AL157915.3, U63313.1, AC006511.5, AC011443.6, AP001687.1, AC004477.1, AC011508.4, AC083866.2, AC006315.2, Z84572.1, AL136131.15, AC011005.7, AP001429.2, AL035462.21, Z83823.1, AC002350.1, AL138820.11, AC020896.5, AC010206.8, AC011495.6, D83253.1, AC004151.1, AC008813.6, AC005291.1, AL354696.11, AC005225.2, AC004652.1, AC083810.16, AL390071.9, AL021940.1, AP002907.2, AP000962.2, AL031721.1, AL031666.6, AL353807.18, AC004167.1, AL009183.10, AL356095.11, U78027.1, AC018763.5, AL021393.1,</p>

					AL391114.12, AL121928.13, AC068799.14, AC004223.1, AC004846.2, AC002400.1, AC004867.5, AF141309.1, AC006101.3, AL390298.13, AL136297.3, AL035422.12, AL022100.13, AL355593.21, AC010374.5, AC011485.6, AL049643.12, AC008886.5, AC020916.7, AC005694.3, AL139385.12, AC003006.1, AL035659.22, AL022165.1, AC007066.4, AC022816.15, AC068312.4, AL133448.4, AL080243.21, AP000755.4, AC025430.5, AC011510.7, AC064878.9, AL139415.10, AL391137.11, AL356481.16, AC007561.4, AL133387.8, AC011900.6, AL137100.4, AC007014.1, AC067956.3, AL121712.27, AL121809.6, AL159191.4, AC069246.5, AC019171.4, AC004752.1, AL031427.15, Y18000.1, AC004832.3, AC066589.3, AC003065.1, AC073115.5, AC006028.3, AL353746.6, AC005800.1, AC090885.1, AC006515.7, AP001284.5, AC006011.2, AL035587.5, AC006017.2, AL121943.22, AP001698.1, AL445685.17, AC011477.5, AC018648.5, AL352979.4, AC016995.4, AC022401.3, AL133467.4, AL135978.4, AC004913.2, AC005387.1, AP000045.1, AL138707.10, AC023105.7, AC002039.1, AC018755.3, AC023137.5, AL117258.4, AC004076.1, AL513131.1, AC008844.5, AC018636.4, AL353657.26, AL031228.1, AL450344.4, AC006319.3, AD000092.1, AL157789.6, AC006049.1, AC011461.4, AL133284.13, AL121934.17, AL022316.2, AC008392.6, AC010677.4, AC006205.7, Z82244.1, AL139388.4, AL139322.13, AC012476.8, AC022415.5, AC068976.5, AC005393.1, AC006057.5, AC007324.55, AC020904.6, AC026464.6, AP001692.1, AP001724.1, AL139317.5, AC007003.4, AC009779.18, AP000963.2, AP000228.1, AC007919.18, AL499628.1, AC007051.3, AC010422.7, AC011718.2, AC006127.1, AL135927.14, AC007227.3, AC005696.1, AC004754.1, AL359236.4, AC026753.5, AC004534.1, AL356414.11, Z86090.10, AF107885.2, AP000547.1, AC010530.7, AC020740.5, AL162426.20, AC005488.2, AL034372.33, AP000689.1, AC037492.5, AL035409.15, AC005037.2, AL049793.4, Z97196.1, AP000140.1, AC009743.1, AP000359.1, AP000088.1, AL357312.8, AL590682.9, AA252707, AA252834, AL521986, AL521985, BG260084, AI817466, BE904098, BE894263, BF793132, BE873833, BF439331, BF983713, BF203429, BE910310, AI188184, BE904210, BG031216, AI803637, BE218333, BE378900, AW953618, BF667874, BF940993, AI479853, BG116696, BE747895, AI199381, AI423127, AI458395, BE389366, AA743927, AV728694, AV728921, AA780244, AA284556, AI138746, AW602172, AI340185, AI497680, AI701138, AA410675, AI949706, BF594730, AI570504, AI300375, AA262669, AA447624, AA423881, BF110364, AA400547, AA429108, AA316560, BF344873, AA042988, AA452960, AA284795, AI348309, AA043042, AA316842, AA451674, AA423902, AA400244, N80231, BF003113, AA042861, R76970, AA452820, AI571390, BE549542, AI560629, AA453218, H60916, AA868885, AA235589, AA496998, AW105644, AA448024, AA428872, BF589245, AA042849, AI654988, AA429062, AA357706, AW794510, R93695, T90652, AA523984, BF745192, R34969, BF087292, H83024, BE261946, AI869572, H51706, AA946612, W38322, R34866, AA044412, AA682182, T83180, R96730, R94542, T78530, AA962639, AA810439, BE382714, AA504714, AA367144, AA044398, H52424, H82805, W16760, AV660662, AI540890, AV727776, AV702804, AV706744, AV702994, AW961463, AW953965, AW950035, AV698087, AV721957, AV706987, AV652443, AV703263, AV706775, AV706915, AF113126.1, BC000557.1, AC009743.1, AP000359.1, AP000088.1, AL357312.8, AL590682.9, AA252707, AA252834, AL521986, AL521985, BG260084, AI817466, BE904098, BE894263, BF793132, BE873833, BF439331, BF983713, BF203429, BE910310, AI188184, BE904210, BG031216, AI803637, BE218333, BE378900, AW953618, BF667874, BF940993, AI479853, BG116696, BE747895, AI199381, AI423127, AI458395, BE389366, AA743927, AV728694, AV728921, AA780244, AA284556, AI138746, AW602172, AI340185, AI497680, AI701138, AA410675, AI949706, BF594730, AI570504, AI300375, AA262669, AA447624, AA423881, BF110364, AA400547, AA429108, AA316560, BF344873, AA042988, AA452960, AA284795, AI348309, AA043042, AA316842, AA451674, AA423902, AA400244, N80231, BF003113, AA042861, R76970, AA452820, AI571390, BE549542, AI560629, AA453218, H60916, AA868885, AA235589, AA496998, AW105644, AA448024, AA428872, BF589245, AA042849, AI654988, AA429062, AA357706, AW794510, R93695, T90652, AA523984, BF745192, R34969, BF087292, H83024, BE261946, AI869572, H51706, AA946612, W38322, R34866, AA044412, AA682182, T83180, R96730, R94542, T78530, AA962639, AA810439, BE382714, AA504714, AA367144, AA044398, H52424, H82805, W16760, AV660662, AI540890, AV727776, AV702804, AV706744, AV702994, AW961463, AW953965, AW950035, AV698087, AV721957, AV706987, AV652443, AV703263, AV706775, AV706915, AF113126.1, BC000557.1,
HEEAJ02	176	633657	1 - 1024	15 - 1038	

HEEAQ11	177	777843	1 - 907	15 - 921	AB029821.1, AF176807.1, AF176806.1, AC020558.4, AF294468.1, AF294465.1, AF294460.1, AF294464.1, AF294466.1, AF294463.1, AF294467. 1.
					AW572915, BE500968, AI631708, BF056783, AI638675, AW024125, AA812885, AA911102, AI651682, AA758532, AA934362, AW104268, AA968716, BF223496, AA496078, AA608859, AA973942, AW418725, BE041425, AA931770, AA513329, BF056762, AW975618, AW949645, AW964468, AW966389, AV724520, AW966330, AW973541, C14331, AW960553, AV718692, AV702035, D80195, C14389, AV718489, AV719468, AV718800, AV719822, AV719324, AV718707, C14429, AV718931, AW366296, AA305409, AW966534, D59619, D80210, D80166, D80240, AW973488, D81030, AW949656, AW949642, AW965185, AW965197, AV720211, AW966075, AW978634, AV723927, AW966065, AW949653, AW962245, D80212, AW966053, AW959799, D80219, D59859, D51423, AW973474, AV699550, AW966050, AV719783, AW975613, AW965196, AW965184, AW978661, D51799, AV720464, D80253, AV718770, AV720731, AW9666029, AW973307, D51060, AV718938, AV718633, AW975605, D59610, AV720878, AV719557, AW960465, AV699447, AW958993, AV722801, AW973334, AW959136, AW966531, AW949646, AW949654, AW959202, AW966013, AW960473, D58283, AW966022, D80022, D80366, AW964756, AW975621, AW964477, D80188, AW966041, AW965163, D80391, D80164, AV718844, AW959582, AW966054, AW966059, AW958992, D59787, AW978648, D59502, D59467, AW949631, AW949643, AW949618, AW949655, D59275, AW960454, AW973330, AV720791, AV720203, AV719188, D80043, D80227, AW966062, AW956434, AV718440, AV720028, AW959597, AW959628, AW965177, AW959570, AW973485, AW965175, AW973482, AV700229, D57483, D59889, AW959062, AW964488, AW949641, AW962082, AV699927, AV738340, AV723097, AW966043, D80269, D80196, C15076, D80024, AV699866, AW949658, AW949657, D80241, AW956397, AV699746, AW949629, D59927, AW375405, AW964737, AW973447, D80038, D80193, D50979, D50995, AV700889, AV744690, AW949630, AW966030, AV720150, AV721386, AW965158, AW949633, AW949632, AW966032, D80378, D80045, AW753053, AW966023, AV718530, AV720812, D51022, C14014, AW960532, AV701004, AW960564, AW959469, AW960504, AW177440, AV744012, AV720533, D80248, AW975623, AW973490, AI905856, AV701125, AW752082, AW962395, AV701166, AV701149, AV703738, AW973445, AW964532, AW966368, AV720151, AW966397, AV720220, AV705869, AV720616, AV742732, T03269, AW973465, C75259, AW960570, D80133, AW178893, AA305578, AW966369, AV699669, D80302, D80251, AW973473, AW965176, AV727978, D81026, AA514186, AW966378, AW966386, AW966331, AW966398, AV706147, AV719913, AV720654, AW966399, D80522, AL121894.26, AF058696.1, AF271371.1, AB028859.1, X67155.2, D34614.1, D88547.1, AB002449.1, D50010.1, AB038216.1, U79457. 1.
HEEBI05	178	130761 1	1 - 880	15 - 894	AV653338, AI150047, AA335017, AA335685.
HEGAH43	179	532596	1 - 428	15 - 442	AA400429, AA994981, AA846419, AA453384, AI015471, AA992965, AA400538, AL360078.16, AJ236910.1, AJ236909.1, AF327147. 1.

HEGAN94	180	885637	1 - 568	15 - 582	AI018488, BF509739, AL157823, 9.
HEGBS69	181	109334 2	1 - 795	15 - 809	BE041526, BF514935, BF515526, BF515928, AI656756, AL138127, AI150056, BF510812, AW165981, AI360220, BE963568, AL512683, 1.
HELGK31	182	681138	1 - 1382	15 - 1396	AL519840, AL519839, BE379142, BE786389, BE796190, BG117991, AL524590, BE744597, BE909841, BE907873, AL043167, BE544763, BE740216, AL518390, AL529705, AW592682, AW874363, AI085412, AW958434, AU126873, BF132076, AA604374, BF541758, BF794982, BE545432, AA936378, AA161264, AA531252, BE563799, AW072533, AA639981, AA677594, AI138280, AA218539, N94446, AI363012, BF114843, AI083837, D51047, BF343738, AW499697, AA437204, AA132746, AV712240, AI086913, AA889889, AA161263, AA916429, AA142878, AL518389, AA810233, AA613892, AA424834, AA143152, AA603133, AA132651, HI1615, AW367012, AI268931, AI955333, AA948407, AW327686, AA856621, AA227183, AA524602, BE537412, W30793, AA969047, BE875215, AU149648, R54573, HI8393, AW080718, AI082408, AA354603, BG024936, AA807409, BE762990, AA225683, AA745633, R09626, W22670, AA296971, N79058, AW131898, AA283047, R09625, AA974359, AA216343, AW352289, AI014772, AA426455, AA335199, AW352287, AA876045, AA569616, AA426587, AA365881, BE645623, AW352294, AA218538, AA225708, AW149303, Z45742, AA298844, AA693654, Z41394, AI740665, BE142815, R09514, AW263934, BF515182, AA652379, W24000, AI400292, BF893436, AA281197, AI376646, AV703989, AV725633, AV656373, AV702372, AV702417, AV704217, AV702280, AW954248, AV702998, AW950443, AV725991, AW960601, AW952403, AW952410, AW952183, AW954237, AW952751, AW956075, AV645936, AV709587, AW955723, AV658084, AV692600, AV650315, AV659389, AV697880, AV727613, AV726010, AV660258, AW959521, AV647789, AV708109, AW956474, AV659294, AV727787, AV703146, AV725745, AV686060, AV660608, AW951239, AV728148, AV726590, AV656478, AV709314, AV653353, AV654070, AV691080, AW951281, AV702385, AV702772, AW949802, AV658275, AV652001, AW955662, AV703669, AV707979, AV725208, AV727003, AV709580, AV725582, AV708786, AW957517, AV659547, AV727526, AV651920, AV725618, AW954439, AV706734, AV729076, AV702266, AV725577, AV725033, AV706223, AV728924, AV725617, AW954206, AV707863, AV696931, AV707798, AV703062, AV727822, AV707572, AV699089, AV705135, AV701874, AV703501, AW962444, AV707401, AV701183, AV709660, AV704585, AV654035, AV709935, AV707652, AV728721, AV707654, AV707663, AV683994, AV704042, AV654282, AV697288, AV729220, AV709880, AV687035, AV698290, AV704847, AV694836, AV706882, AV697498, AV702954, AV727238, AV686420, AV694812, AV682997, AV696866, AV727126, AV707656, AV655890, AV728997, AV706162, AV705635, AV686390, AV702794, AV656256, AV686417, AV686083, AV698429, AV656240, AV655577, AV694871, BC001239.1, AF201931.1, AK001341.1, AL136674.1, AL137878.11, AF217994.1, Y08991.1, Z30183.1, U94592.1, U45328. 1.
HELHD85	183	847372	1 - 1872	15 - 1886	AI284640, AL138265, AL046409, BF677892, AW193265, AV760937, AW969629, AI431303, AV760777, AI613280, BG249643, AW407578, AI281881, AV763354, BF130107, AI345654,

					<p> AV728425, AW502975, AW965008, AI334443, AV710066, AW419262, AI350211, AI801482, AW473163, AW238278, AI754658, BF668217, AF330238, AI754253, AV762139, AI963720, AV725423, AV728928, BE895987, AW303196, AW274349, AL119691, BF681427, AV762098, AI133164, AW438643, BF827410, AA581903, AW970848, AV762009, AI270117, AI076616, AW301350, AL045053, AW265393, AW021583, AW833862, AW276435, AL138455, AW974109, AW439558, AW327868, AV762050, AV729960, AL041690, AW276827, AI890348, AI567076, AV761362, AL044940, BG109996, AW004911, AF074677, AA720702, AV764578, AV761489, AI305766, AW500125, BE047069, BF970654, AU145393, AV735495, AW731867, BG236735, AV764398, AI421841, AL042753, AW960468, BE206443, AI624142, AA621858, AV761925, AV759172, AV702857, F36273, BG222267, AA164251, AI799642, AI249997, BF793664, AU147104, AI708009, AV763971, BE389111, AV734666, AV762067, AA491814, AV761106, BF697673, AI434695, AV740801, AV759117, BF241967, AW265385, AW062724, AV763122, AW265009, AL037683, AW103758, BF940837, BE350475, AI305547, BF475381, AL121235, BF337291, AI192631, AI821271, AA469451, BF942454, AL042420, AI341664, AV710774, AI053672, AW973397, AI623720, AI903462, BF680074, BF793766, BE674881, AV763550, AL048925, AV760042, AW073470, AI679782, AL046205, AW963497, BF681576, AI457397, AW662543, BF797630, BF592311, AI471481, AA610491, AW088846, AV733830, BF965007, AA526787, AV759505, AV730310, AW302013, BG036665, BF541116, AW301809, AV764530, AL038474, AV761631, AW021207, AV762959, AV762395, AI289067, BG171096, AW270382, AV763633, BE042649, AW338086, AA491284, AA908687, AA51552, BF674620, BE160516, AW410400, BG178002, AI133102, AW083364, AW872676, AW088202, AI919265, AI801600, BF792870, AW979060, AV762535, AA630362, AL119984, AI688846, AA631507, AI537506, AV743472, AI801591, H56509, AA584145, AI312309, AI732865, AV764329, AA521323, AI937850, AW574794, AU145711, AP001423.1, AP001731.1, AP000021.2, AP000163.1, AC004765.2, AL391803.14, AL122001.32, AL139809.16, AL354932.26, AC006128.1, AC018720.5, AL160155.19, AC005696.1, AF207550.1, AE006462.1, AL158207.15, AL022315.1, AL513008.14, AL121904.13, AL022313.1, AL356299.16, AL450226.1, AF077058.1, AL023575.1, AC006483.3, AL049758.11, AF129756.1, AC009412.6, AL136418.4, AL139054.1, AF196969.1, AC010422.7, AC011497.6, AC073593.13, AL139230.25, AC005295.1, AL136980.5, AL162426.20, AC005808.1, AC007536.9, AL121903.13, AC000397.1, AL355871.5, AC073073.2, D83989.1, AL353135.32, AC009470.4, X75335.1, AP002906.2, AC018637.3, AL359457.12, AC011495.6, AL139396.17, AL354707.17, AJ400879.1, U78027.1, AL049830.3, AC018751.30, AC009516.19, AC000041.2, AP000114.1, AP000046.1, AL355543.13, AC005324.1, AC008770.6, AC008736.6, U91323.1, AL118520.26, U66059.1, AL390205.17, AC005291.1, AL035422.12, AC008543.7, AP001781.4, AL121653.2, AC009228.4, AL035071.17, AC027644.9, AC010404.5, AL133153.3, AC005740.1, AC009269.6, AL161656.20, AC002996.1, D84394.1, AC079177.21, AC011489.6, AC006285.11, AC007919.18, AC007620.30, AC073138.3, AC009756.9, AP001717.1, AL031848.11, AF015151.1, AC0090939.1, AC005839.1, </p>
--	--	--	--	--	---

HELHL48	184	696945	1 - 2957	15 - 2971	<p>AL132640.4, AC006079.1, AC009220.10, U57005.1, AC005412.6, AF001549.1, AL356806.4, AL049762.20, AC020558.4, AL160269.14, AF015149.1, AE006463.1, AC020663.1, AC007298.17, AL121972.17, AC006208.3, AL021808.1, AL352978.6, AL137792.11, AP001068.1, AC000360.35, AP000500.1, AL451126.18, AC068712.6, AC026464.6, AL358274.3, AC005921.3, AL392044.7, AJ011930.1, AC006292.1, AL163300.2, AC007057.3, AL109923.29, AL034405.16, AC068466.4, AC083884.6, Z82976.1, AL080243.21, AC011890.4, AL031670.6, AC008474.7, AC008745.6, AC002425.1, AJ009615.3, AF015156.1, AC021036.5, AC011467.7, AC002994.2, AC008083.23, AL353716.18, AD000092.1, AC027689.10, AC005261.1, AC011310.3, AC007051.3, AL121891.22, AF015147.1, AC004166.12, AC020896.5, AC004019.20, AL022163.1, AC018728.5, X54176.1, X55931.1, U57008.1, AP000642.5, AC011740.7, AL109804.41, AC004534.1, Z86061.1, AC008886.5, U57009.1, X54180.1, U18391.1, U18392.1, AC020906.6, U57006.1, AC005815.1, U18394.1, X55925.1, U07562.1, AF196779.1, AL136223.11, AC006017.2, AL049795.20, AC009087.4, AL136319.8, AP003357.2, AC005089.2, AL391244.11, AC016025.12, AC002549.1, AC011479.6, AC006241.1, AP001716.1, AL138960.16, AC078961.23, AL356278.8, AC006274.1, AL353788.33, AC002430.1, AL008730.1, AP000432.4, AL139113.21, AC007404.4, AL008716.1, AF265340.1, AL138724.12, AL158850.8, AC008753.8, AL355593.21, AL031668.23, AL158040.13, AL139009.14, AL139099.2, AC007374.6, AL590043.7, X54175.1, AL157838.24, AL078639.5, AC005393.1, AC020893.5, AC009497.3, AC004990.1, AC007384.3, AC004185.1, AF217796.1, AB050248.1, AL157778.9, AC006111.3, AC018842.5, AC055120.5, AC011461.4, AL138885.21, AL138755.13, AC016257.22, AC008812.7, AC004455.1, AP000901.5, AC078874.13, AC020716.3, AF042090.1, Z84490.1, AP001670.1, AC005913.2, AC009318.11, AL160411.25, AC073520.6, AL035404.20, AC034198.6, AL031650.22, X53550.1, Z83840. 7.</p>
					<p>AL529435, AL524123, AL524122, BF312538, AU129727, BG164871, BF348048, AU120482, BG167168, BE733600, BE876571, BE875645, BE296592, BE901138, BF343028, BF308771, BF345199, BF308189, BE336871, BG028125, BF115264, BG116986, BG249650, BE903726, AV728373, AW007132, BG121227, BF206051, AW963600, BF347698, AU151806, BE294229, AW303548, AW411067, AW967356, AW411066, AU128086, AA100522, AI867409, AU137055, AI378902, W28880, AW752755, BF308950, AW751506, AI421175, BG180673, AW590377, BF001722, AI872412, BF924126, AA180518, AI373035, AW179322, AI401197, R24305, AW178945, AW150193, AA209515, AA564224, AI370802, AI984047, BF438508, AA293441, AA088551, AI758667, AI275100, AW996404, AW007984, AI800710, AU150189, AI361596, AU150403, AA669849, BF432420, AI559326, AU146534, AA514455, AW513096, N31325, BF754347, AW896670, BE789836, AI299591, AI272929, AI089779, BE008621, AI912569, AI276235, AI283742, BF939706, AA508685, AA180517, AW169281, AI688823, AI310354, AW007978, AI359948, AI148446, AA292742, AA478976, AI041725, BE790438, AA292741, AI221864, AA157827, AA552023, AA112746, AA513477, AA232508, AA148445, AI493536, BE206110, N26490, BE147464, AA293508, T84545, BE093924, BF884193, AU157002, F12444, AI348568, D31225, N47540,</p>

						AI269318, BE147790, AA088385, T74066, AA053180, H30187, AA654655, BF154572, AW579667, T88004, T35342, AI074255, AW571550, BG055222, AW579684, Z39831, BF434566, AW390755, AV698355, Z43770, AV685886, BE463536, AW270979, AW378596, AW514887, T31997, AA863225, BE296813, H04167, AI246176, AA365514, AA513359, AA477913, T34879, BF347090, BF438580, AA151938, AV684774, AA336395, AA492462, AW009840, AA053627, BF906710, T87910, AI470954, BF814719, BF593969, T64888, AA136495, AA179793, H08606, AA907036, F10066, AA503814, R22025, AW577064, BF749344, AA298224, AA339096, AA079476, T35287, AA936508, AI620090, AA079475, AW378971, T39180, F08643, H08605, AA372556, AA995437, BE294737, AW300420, AA496416, R01535, BE311798, AA345134, R44902, R22078, F02150, R49987, BE840622, T35182, AA369833, AI244019, BF947140, R00876, BE840609, BE294732, H04166, AA887342, BE143234, N47539, AW374684, T31964, AW178632, AA635427, AA188708, AW582129, R47850, AA152055, BF476766, AW291610, AA369871, AW451289, BE467357, AI630981, AW134630, BE763447, AI383035, BG255592, T58576, AA248989, BC003128.1, BC006200.1, AK001112.1, AL161962.1, BC000035.1, AK001524.1, AF151847.1, AK001424.1, AL359542.13, AL034405.16, T58537, AA232607.
HEMAM41	185	741647	1 - 1323	15 - 1337		AL515525, BF966744, BF793066, BE905040, AV697070, AW157314, AI816071, AL515524, AW261874, BF966307, AW163370, BF727408, AW151173, AW001897, AW236835, AW235694, AI801254, N62855, AI815990, AW117364, AW976507, AW150293, AA876913, AI635914, AA779526, AI584106, R40658, D12158, AW148443, AA338451, AW166670, AI245076, D12218, AW369838, D57788, AW631476, AA969485, AC021086.4, AC027315.3, AC010382. 4.
HEPAA46	186	596830	1 - 1115	15 - 1129		AA835052, AI220434, AA335178, AA905529, AL031650. 22.
HEPAB80	187	130779 0	1 - 785	15 - 799		AW274007, AI677890, AW510786, AW468943, AA335322, AI807924, AW172560, AC006116.1, AC011506. 3.
HEQAK71	188	598018	1 - 1675	15 - 1689		AW960453, AA577682, AI740956, BF589404, AI810888, BE894896, AI129260, AI743307, AI953066, AI017271, AA631231, BE503649, AI400945, AI670754, AA534344, BE765639, W72296, BE673403, AI188476, AW264555, AW880277, AW305140, N54915, AA917732, AI439508, BF510644, BF984766, AA088886, AV750742, BG109860, BE765623, H01968, AA573814, T69918, AI758231, AI479210, AW138022, AV751020, BF437113, N40587, N25881, R36078, BF989181, BE897314, BF574472, AL036615, AL117461.1, AK026979.1, AC011093.6, AL359709.15, AP001437.1, AP000011.2, AL390798.3, AP001728.1, AC005345.1, AP000153.1, AL078645.31, AL137021.15, AC004817.2, AL357117.20, AL442183.4, AC004830.1, AL354696.11, AC003013.1, AL138743.5, AL513023.12, AC012405.5, AK027165. 1.
HERAR44	189	566811	1 - 406	15 - 420		AC007358.2.
HESAJ10	190	526013	1 - 1076	15 - 1090		BG163863, BF973568, BE905545, BE440123, BE877406, BE878414, AI810399, AA421950, AW954926, AI826072, AA507017, AI597673, AA147367, W46280, AA586621, W70172, BE879100, AA595444, AA725205, AI701337, AA421951, AA722808, AA988274, AA844455, W96316, T59591, BF869408, BF858292, BF858296, AA587061, AI077904, BF858302, AA147419, AA058506,

					<p> AW579978, AA649904, AA651755, AW383857, R24354, A1077596, AA576389, A1734990, AA319027, BF858301, AA034247, AA054465, AA814555, W69907, BE833571, BE159104, BG170925, A1918084, W96221, AA326962, AL048246, AL048247, BF834026, BF339936, AA626906, AA897619, A1826118, BF363870, AA683597, AA932608, AA046341, W32814, R24251, BF858297, AW971745, AW750463, AA046263, AA630968, BE612945, BE622828, BE622931, BE613136, BE614237, BE613349, BE613070, A1146631, BE621911, BE614307, BE620742, BE618811, BE622868, A1074824, A1074849, BE614451, A1081420, AL119457, A1086654, AL119324, AL119511, AL119399, A1954162, A1270350, AW877209, AL043152, AL042544, A1675825, AL042382, AW970048, AL043168, AL079794, BG164558, BF525578, BE891834, BE964767, AL042866, AW029263, BE779982, AW023871, BF764534, A1096771, A1634450, BE965493, BG251257, BF811802, BF924856, BE733009, AW129271, BE964497, F37450, A1433611, AW025279, A1627896, A1811422, BE967255, A1305157, BF814360, A1431323, BE963918, AW302854, A1349944, A1925404, AW964095, A1812080, AW271119, AL079741, AW028442, A1688848, BF750875, A1520931, A1335209, A1050666, BF817418, AL530922, AA494167, AL037104, BE897632, A1334450, AW131112, AL037081, AW268220, A1880009, AA808175, A1570389, A1635702, A1859464, BG254754, BF055742, A1613548, A1524654, AW961463, A1336586, AW403717, A1349004, BG168646, AW172723, AL042981, A1805638, A1336575, AW073898, BE250931, AW083804, BE965251, A1891157, A1811644, AA806719, AW022682, BE393551, A1270039, BG034746, A1263584, BF812963, A1480118, A1309306, A1244380, BG166697, A1452993, BE613727, BE965724, AL037582, AL037602, A1636788, AL038605, BE964728, A1620302, A1281412, AV716516, AU118477, AV760924, A1926593, A1336567, A1866465, AW194079, A1699011, BF817824, BF032768, BF764538, A1924971, A1702527, A1345823, A1915295, AL121306, BG113605, AW268243, AW301395, AL119443, A1312348, A1540458, A1472566, AW081343, BF751997, BG032704, A1680504, AL514959, BF967034, AW162189, AW082623, BE968711, BE566196, BE964110, AW074987, AV682067, A1583611, A1951222, A1658566, AC005005.1, U77594.1, AB026436.1, BC009395.1, AF205073.1, AK026749.1, AL137711.1, AF274348.1, AF274347.1, BC009294.1, AL117416.1, AF219137.1, X66975.1, AL389978.1, AB048913.1, AF067420.1, AK026642.1, BC002471.1, AL389935.1, S69510.1, BC004950.1, AK026784.1, BC002524.1, AK000489.1, AF081571.1, S76508.1, AK026865.1, AK025541.1, J05032.1, BC005890.1, AL136748.1, AF352728.1, AC020956.6, BC004925.1, AK026626.1, AK024747.1, BC007456.1, BC002844.1, BC005002.1, BC002491.1, AL080124.1, AL137556.1, AK025414.1, BC009253.1, AC007383.4, AK026533.1, AL080154.1, BC005829.1, AL136984.20, AK000450.1, AB060883.1, AB060841.1, BC003687.1, BC001761.1, AB060826.1, AL137271.1, AF218006.1, BC001349.1, AF369701.1, AL137641.1, AB047897.1, BC002343.1, BC0006494.1, AK000753.1, AK000250.1, S77771.1, AL110222.1, BC001470.1, AC021325.5, AF012536.1, BC009033.1, AL117440.1, X99226.1, AL121916.14, BC002444.1, BC001236.1, BC007207.1, AL512754.1, AL359600.1, AF225424.1, AB049900.1, BC000090.1, U42031.1, AB060839.1, AK024855.1, AL136754.1, AF205861.1, BC005007.1, </p>
--	--	--	--	--	---

					AL391244.11, AC009484.3, BC008185.1, AK027116.1, AF245044.1, BC007248.1, AF106934.1, AF090901.1, AJ012755.1, AL161628.9, BC002688.1, AF162270.1, AL080060.1, BC002409.1, AK025375.1, AK026741.1, AF218023.1, BC003548.1, AK025524.1, BC006465.1, AL133072.1, BC001082.1, AL136799.1, AF261134.1, BC008930.1, BC002752.1, BC008781.1, BC008649.1, AF159141.1, BC002519.1, AL137530.1, AK026522.1, AL117626.1, BC004395.1, AB049880.1, AL136889.1, AL359601.1, AB050431.1, BC007198.1, BC002481.1, AF106862.1, AL389939.1, AB051158.1, AL137536.1, AL122098.1, AL137705.1, AB044545.1, AC026431.3, BC004943.1, BC004426.1, BC000051.1, AK024594.1, AL136615.1, BC002373.1, X69819.1, BC008280.1, L30117.1, AB060916.1, BC007355.1, AK027146.1, BC008785.1, AB060903.1, AL512719.1, AB056768.1, AC008507.8, BC005015.1, AK027104.1, BC007462.1, BC006164.1, AK027204.1, BC002631.1, AB052191.1, BC006136.1, AL359615.1, AB062978.1, U75370.1, X53587.1, BC008455.1, AB049848.1, AF111112.1, AF276658.1, BC003410.1, AK024538.1, Y14040.1, AB049849.1, AK026528.1, AB047623.1, AK000137.1, AK027082.1, BC007391.1, BC004951.1, AL050172.1, BC007241.1, Z82022.1, AF217987.1, AF202636.1, AB048975.1, AL136792.1, AK000421.1, M86826.1, AK027188.1, AL389947.1, BC003684.1, AL353940.1, AL050393.1, AL136784.1, AC026464.6, BC008070.1, AL049460.1, AB056427.1, AK027213.1, BC006472.1, BC000713.1, AF151109.1, AB063038.1, AL136780.1, AK026551.1, AK027136.1, BC002777.1, AL117648.1, AL136928.1, BC008673.1, BC001166.1, BC003052.1, BC003650.1, BC006412.1, AL133070.1, AL122104.1, AB063008.1, AK027161.1, BC004256.1, AB048914.1, AL136644.1, BC006458.1, AK026571.1, AB048974.1, AF305835.1, AB044547.1, AB048995.1, Y14314.1, BC004244.1, AF252872.1, U00686.1, BC006207.1, BC000054.1, AF040751.1, AK025484.1, AF044323.1, AL389951.1, BC003122.1, X65873.1, BC006133.1, AL136805.1, AL133665.1, AL359618.1, BC006807.1, BC006414.1, AL121828.17, BC000077.1, AK026532.1, BC004533. 1.
HETAB45	191	609827	1 - 1662	15 - 1676	AL520667, BE737374, BE734304, BF689505, BF343502, BG179655, AW953641, BG168504, BE747867, BF982990, BE378257, BE514593, BE909615, BE870978, BG058649, BF689070, BG029850, BE546131, BF690427, AI688113, AI554392, BGI15902, AW580475, AA911109, AA778384, AA486370, BF874009, AI382028, AA776265, AW173438, AW382483, AI523553, AA563686, AI493765, AA906681, AA484857, AW752131, AI362311, AA811238, BE047437, AI276177, AA838288, AA479791, AA460659, AA259052, AW580486, AI097482, AA488079, AI082243, AA088205, BE763979, AW510339, AI609703, AW404956, AI093069, AW438882, AI350871, AI953839, AA285058, AW366250, AI033274, BG029140, AV683434, AA648139, AA226399, AI087234, AA594766, AA477188, H53631, BE141358, AI298774, BE743169, H03363, H04050, BE141360, BG006416, AI687929, AI270613, AA297403, BE141357, H48473, AA496296, BE259832, T86181, AW188898, AA359247, BE185788, H28080, AI433271, R70772, R23345, H53672, AI500391, H70534, AA374856, AA297085, R33033, R99170, R33920, BE141344, AA852639, AW088943, R81465, AI400220, BE832975, BF359882, AA621048, BF813460, AA853069, R81663, AI963710, R23264, BF748942, AA290677, T83919, AA428830, AI687795, BE163435, BE163434,

						AI289188, AW027045, AA808274, AW074305, AA290975, AA297468, R26089, AA226370, BF000386, AA461006, R23497, AA359017, AW392388, AA258974, BE543413, BF768547, BE702942, T86180, AA291083, H26077, T83747, BE702948, AW058461, BE872231, BE702945, AW749912, BE141374, BF841749, AW016612, BF035814, AW905754, AI953927, AA297469, BC002467.1, AK000261.1.
HETBR16	192	703243	1 - 1555	15 - 1569		AW661837, AI127395, D62246, BF838051, AA363498, BF673053, BF838050, N68223, AA608520, BF78696, AW238127, AA570224, AI635819, W45298, AW949001, BF932686, BE063025, W45283, BE063030, BF815072, F31654, AI610607, AI640411, AA568947, BE049229, BF856556, AI679442, AI679952, BF857619, AA665645, AV656064, AW949012, AA653612, F27410, AV740009, AI889440, AI540408, AV720211, BF850690, AA605266, BF844769, AW261996, AI885488, AA494090, AA626402, AW020088, AA486970, AW167154, AI809818, AA745356, AI634601, BE162124, AW271917, BE179216, AI859280, AU158549, AW148386, AW971243, BE674880, AA661948, AA665330, AA649148, D82461, F31619, AI565245, AI932902, AA708213, AC072052.6, AL021807.2, AL132718.5, AL132653.22, AP001417.2, AP000160.1, AL122023.3, AL391987.15, AL162385.16, AL390295.10, AP000018.2, AC008122.15, AP001730.1, AL078475.2, AC090051.8, AL132838.4, AL050302.2, AC006026.2, AC004964.2, AC008745.6, AC019274.5, AL163203.2, AC002115.1, AL139809.16, AL139317.5, AL118524.25, AC004098.1, AC006387.3, AL033529.25, AL360219.18, AL163210.2, AC011455.6, Z98048.1, AC007637.9, AL021408.1, AL353679.18, AC021019.5, AC005668.1, AC011497.6, AC010150.3, AL135839.15, AL445490.6, AL033378.12, AF258547.1, AE000658.1, AL13545.10, AL031666.6, AL157829.24, AC020601.10, AC011540.3, AC002350.1, AC007881.4, AC007954.7, AC022407.6, AP001746.1, AB020878.1, AC007055.3, AC003029.2, AL158089.8, AL391384.18, AL352979.4, AC073964.3, AC023668.4, AL356805.5, X87344.1, AL445466.9, AL590043.7, AC083875.1, AC012592.10, AL161938.6, AF258545.2, AF084941.1, AL008723.8, AC011604.10, AC090842.1, AL359238.4, AC018448.16, AC004066.1, AL354707.17, AC068948.1, AL354797.16, AL035671.5, AL050335.32, AC003954.1, AC010620.4, AC021016.4, AC005666.1, AL135927.14, AC007227.3, AC008625.5, AC008521.5, AL022717.1, AC019171.4, AL356782.14, AC003106.1, AL034349.3, AL035587.5, AC007263.4, AC010422.7, AL583856.6, AC004671.1, AC010976.5, AC011471.6, AL162274.17, AC005899.1, AC005406.2, AC023355.5, AC004686.1, AF008243.1, Z94801.1, AL390252.9, AL031734.9, AF015416.1, AL158040.13, AL354993.24, AC005670.1, AL121891.22, AC073838.6, AC005000.2, AC005971.5, AL137230.3, AC009086.5, AL137853.12, AC018828.3, AC006211.1, AC002985.1, AC005209.1, AC022383.3, AL445196.7, AL109946.12, AC011494.2, AC022384.4, AC006500.4, AC008645.4, AC015968.4, AC006353.3, Z85999.1, AC006017.2, AC018832.4, AL160269.14, AC068492.2, AL355595.10, AC005399.19, AC010267.6, U80017.1, AC016598.5, AC005411.1, AC000385.1, AC003041.1, AC011479.6, Z97630.11, AC004881.1, AC008770.6, AC016770.10, AF111168.2, AL133406.14.
HETLM70	193	117751 2	1 - 1237	15 - 1251		BE645551, BE304956, BE048918, BE740087, AW960605, BE207572, AW195635, AA177001, AI824341, AW362246, BF591120, AA578987, AA425334, BF002699, AI681859, W37110, AA991211,

HFABG18	194	847073	1 - 1331	15 - 1345	BE859016, AW150693, AW611712, BE179770, BE927270, AI357925, BF038466, AW173702, BF748385, AV724505, AW102565, AW751971, AW748813, BF515478, AA559207, AW601591, AW001725, HI13734, AI908541, BF516168, AA426447, BF090860, AA919025, BE830375, AI686245, AA335628, AA160404, AI521130, AA147206, AI689513, AI699743, BE709540, AW751973, AA906975, AA926906, BF855782, BF872555, AW664454, BF765954, BF090962.
HFAMB72	195	490697	1 - 1309	15 - 1323	BF570393, BF569907, BF344166, AA758023, W63573, AA877107, AW664584, AI924890, BE207784, AI422142, AI811174, AI891097, AI379416, AA631138, AI129321, AA233722, AA861574, AI339443, AW009533, AA635649, AA910314, BF510307, AA948287, AA421401, AA621181, H52254, AA908447, BF127938, AA330666, AA458586, AA328941, AI472877, BF337899, AA853185, R69866, AA852144, BF999691, T49327, AA677036, AW024548, R46515, R69911, BF999694, AW593365, H52351, AA976306, BF903330, T49326, AA233143, AI381786, BE827715, AA359077, AI569251, AI685425, AI826541.
HFAMH77	196	543486	1 - 655	15 - 669	AW897798, AI044056, W44681, AV758808, AW057713, AI445728, AI694501, AI567918, BF929670, AW137633, AI362734, AI560113, R66361, AA973346, R24468, AA256199, R24469, M78793, AA987235, R67503, BF926218, AA688372, AA398164, AA861041, AI024099, AA719008, AI694956, AI150346, AI217933, AA459841, BE217862, AA393248, AI652522, AA629029, AW137492, AI075905, AI796754, AF081250.1, AF081249. 1.
HFCCQ50	197	579993	1 - 1257	15 - 1271	AI340312, BE676214, AA778534, AW300884, AI609950, AI340016, AI632085, AI335706, AA768117, AW027671, AW978490, AW590880, AW589742, AI272784, AW027648, AA983621, AI421130, AA918495, AI280887, AA724472, AA830837, AI024114, R60771, AI675916, N94357, BF960835, BF953963, AW572683, AI159997, AW772189, T05324, W52231, AI394585, F35349, AI445605, AI347406, R49581, AW020397, AB051512. 1.
HFCEW05	198	561560	1 - 919	15 - 933	AL522683, AL522684, AI628729, AA133340, AW139771, AI690104, BF195450, AA133381, AW207332, AI267992, AI961337, R41690, AB049586. 1.
HFFAD59	199	520369	1 - 456	15 - 470	AI674710, AW075264, AI572441, AW665201, AA975502, AL134012, AL359582. 1.
HFFAL36	200	560639	1 - 1006	15 - 1020	AV699250, AV662248, AV699269, AV719565.
					AL537384, AI656961, AI651790, BE466895, AA481913, H54148, AW020416, AA524615, AI309941, T82299, AW971340, AI625683, AA007579, AA670123, AW088680, AA112001, AI250970, AI613405, AI376500, BF526521, AA480105, AA417299, BF054867, AI016470, AI373731, AA416675, BE622947, AI340568, BG180542, BE222669, AI266504, AI291507, AI672420, AI650382, BF885229, AA129526, AA081857, AV699196, AV699199, AA948396, AV699131, AV699223, AV662288, AV699219, AV699246, AV662257, AV699269, AV699218, AV662235, AV662248, AV699182, AV699250, AV662242, AV699204, AV699137, AV699147, AV699098, AW963961, AV699123, AV662247, AV662223, AV699144, AV699170, AV699136, AV699224, AV662272, AV699125, AV699203, AV699200, AV699247, AV662191, AV699255, AV662185, AV662196, AV662317, AV662287, AV699236, AV726209, AV652214, AV650926, AV652066, AW956240, L48842, AF051321.1, AF051322.1, AF069681. 1.

HFGAD82	201	513669	1 - 1867	15 - 1881	<p>AL119979, BF346635, AV726399, BF035097, AV727342, AL119977, BF920864, AW888751, N31682, AW148844, AA772781, AA326677, N23200, AW961610, BF976989, BE765872, BE765750, BE765749, BE765443, BF570590, BE765618, BF438771, BE766953, BE766490, F06586, BG057153, R60278, F07047, AA628815, AV722183, R16237, BF364146, AA204942, AV734361, N71200, AI000462, R54067, Z40722, BF337123, R54066, AW903171, H24278, AV726415, H16893, AW897545, H16783, H22887, R16238, F03521, R42035, F05678, T80483, AA321847, AV731162, AV731097, AV730504, AV730299, AV731130, BE763530, R20855, AA386266, AW890775, R45969, R42611, N94832, R39831, F02857, F03323, T03048, R11992, F07675, AU118413, AW890773, AA640468, N95708, F05679, BE830656, BF948144, M85660, AL119687, T08757, AV722325, AW904904, BF344999, AI003266, N76471, N47227, AW903272, BF977690, T53097, BF918689, F01937, N58994, AI000789, AW898733, BE702498, BE699153, AL118827, BE708346, F07242, AW897547, F01938, N51309, AC003037.1, AC022486.4, AC007379.2, AC007064.27, AC006548.20, AC016752.2, AC008175.2, AC007965.3, AC007322.4, T66696, T66697.</p>
HFIIZ70	202	104335 0	1 - 1394	15 - 1408	<p>AL048246, BE877406, BE905545, BE440123, BF973568, BG163863, BE878414, AI810399, AA421950, AW954926, AI826072, AA507017, AI597673, AA147367, BE879100, AA586621, AA725205, AI701337, AA595444, AA421951, AA722808, W46280, W70172, AA988274, AA844455, BF869408, W96316, BF834026, BF858296, T59591, BF858292, AI077904, AA587061, AA058506, BF858302, AA147419, AA649904, AA651755, AW579978, AW383857, AI734990, AI077596, BF858301, AA034247, R24354, AA576389, AA054465, AA814555, BG170925, W69907, AI918084, BE833571, BE159104, W96221, AA326962, BF339936, AA319027, AL048247, AA626906, AA897619, AI826118, AA683597, BF363870, AA932608, AA046341, W32814, BF858297, R24251, AA046263, AA630968, AW750463, AI146631, AI270350, AI074824, AI074849, AI081420, AI086654, AI954162, AW029263, AI675825, BE964767, AI886181, AI799183, AI620302, AW268243, AI634450, AI334450, BE968711, AI540458, BG251257, AI699011, AW268220, F27788, BE733009, AI336575, AW129271, BE964497, BG025209, AI345148, BF817418, BF344652, AI627896, AA983883, BF816455, H42825, BE967255, BF343172, AI812080, BF055742, AI613548, BF814360, AI336494, BE963918, AI452993, AI520931, AI345229, AW302854, AI349798, BF924856, AW168485, AI699862, AI073952, AI349004, AW152469, AW149925, AA494167, BE897632, AI335209, AW961463, AI859464, BG254754, AW271119, F37450, AI687166, AI784230, AW403717, BF987104, AW172723, AI891157, AI480118, AI805638, AI933589, AI811644, AW303089, AI680457, AI783861, AI434741, AW083804, AI251830, AI828731, AI924971, AW268306, AI612759, AI648663, AW022682, AI566630, BE393551, AI537617, BF812963, BF817402, AL119319, BF870154, BF921092, AI499285, BE613727, BE965724, AI446248, AV716516, AI038605, AI680162, AI475408, AI682841, AI568114, AW193872, AI537024, AI866465, AW193843, BF970449, BF032768, BF812938, AI567351, BF764538, BE966990, AI538342, AI620003, BE544111, BF895953, AI610645, BG112239, AI432040, AI866127, AI568138, AI445992, AI922550, AW162189, BG027628, AA493923, AI927755, AW079159, AW117746, AI244380, AI539711, AI8666573, BF909758, AV682124, AI567582,</p>

				<p> BE966388, AI580984, BF854113, AI554343, AI619587, BE964576, AI857797, AW117919, AI922561, AI249877, AI344785, AI783504, AL036214, AI699255, AW163823, AI677824, AI874166, AI698401, AI932949, AI564528, BF915208, AI142101, AI539028, AI866741, AI367210, BF814335, BG120816, BE536058, AI867042, AI537989, AI863191, BE964959, BF913616, AI863321, AI950664, BE061389, BE621256, AW193134, BE974031, AI919345, BE964812, AI364788, AC005005.1, BC009395.1, AL117416.1, AL389978.1, AB048913.1, AK026642.1, AK026784.1, AK024538.1, AK026865.1, BC005890.1, BC009294.1, AF219137.1, AF205073.1, AL389939.1, AL389935.1, BC004925.1, AK026626.1, BC002844.1, AL080124.1, BC004264.1, AL137556.1, AK025414.1, BC009253.1, AK026533.1, AL080154.1, AK000450.1, BC003687.1, AB060826.1, AL137271.1, BC001349.1, BC002343.1, BC006494.1, AL110222.1, AF012536.1, BC009033.1, AL117440.1, AL512754.1, AF225424.1, AB049900.1, AF162270.1, AB060839.1, AL136754.1, AK027116.1, AF090901.1, AJ012755.1, AL080060.1, AK025375.1, AK026741.1, BC003548.1, AK025524.1, AF352728.1, AL133072.1, AL136799.1, BC005007.1, AF159141.1, AL359601.1, AK000250.1, AB050431.1, BC007198.1, AB051158.1, AF106862.1, AL122098.1, AL137711.1, AF274348.1, AF274347.1, AL137705.1, AK024594.1, AL512719.1, AL136615.1, X69819.1, BC008280.1, L30117.1, AB060916.1, BC007355.1, AK027146.1, AB060903.1, AB056768.1, AB052191.1, BC006164.1, AK027204.1, AL359615.1, AB062978.1, BC008455.1, AB049848.1, X53587.1, AF111112.1, AK026528.1, AB047623.1, AK000137.1, BC004951.1, Z82022.1, AF217987.1, AB048975.1, AL136792.1, AK000753.1, BC003684.1, AL353940.1, AL050393.1, AL136784.1, BC008070.1, AB047897.1, AB056427.1, AK027213.1, S69510.1, AL136780.1, AK026551.1, AL136928.1, BC002631.1, AB063008.1, AB048974.1, AL133665.1, Y14314.1, BC004244.1, AF252872.1, AL359618.1, BC006807.1, AK025484.1, BC003122.1, X65873.1, BC006133.1, AL136805.1, AK026532.1, S76508.1, BC004533.1, BC009341.1, BC008382.1, AK000247.1, AB060912.1, AL137526.1, BC003683.1, AK026504.1, AK026597.1, AK026057.1, AL162003.1, AB055370.1, AL359583.1, AK026885.1, AL080127.1, AL110221.1, AK027144.1, AK025312.1, AF125948.1, BC004556.1, AL080137.1, AL133010.1, AL137476.1, AB055361.1, AF078844.1, AK026464.1, AB048953.1, AB063070.1, AB060893.1, AL049382.1, U39656.1, AB060211.1, AL137550.1, AL162006.1, BC000316.1, BC003682.1, AK025541.1, AF217982.1, AL136892.1, AK026462.1, AF104032.1, AL133560.1, AL080074.1, AB019565.1, X82434.1, AK027114.1, AK024992.1, AK027096.1, AL049466.1, AL162008.1, AL050024.1, BC006412.1, AL1389983.1, AK000432.1, AL049430.1, BC004530.1, BC005168.1, AK026744.1, AB060863.1, AL512733.1, AK027193.1, AK026762.1, AJ242859.1, AK000083.1, AK025435.1, AB060852.1, AK000421.1, AL122100.1, AB055368.1, AF090903.1, BC006525.1, BC004874.1, AK026927.1, AL023657.1, AK000206.1, AL137533.1, BC000348.1, AL157482.1, AL512765.1, AL050155.1, AF242525.1, AL136882.1, AL137292.1, D83032.1, AL390167.1, AL137463.1, AF285167.1, AK000652.1, BC008780.1, AL359941.1, AL133067.1, AF353396.1, L19437.2, AK000636.1, BC007456.1, AK026947.1, AK000647.1, BC008485.1, AK026630.1, AL136843.1, AK026592.1, AF000145.1, S61953.1, AF026816.2, AF003737.1, </p>
--	--	--	--	---

HFKE18	203	889515	1 - 2393	15 - 2407	BC003650.1, AL133093.1, AF217966.1, AF061943.1, AB060883.1, BC009310.1, AB055374.1, BC004256.1, U58996.2, Y10080.1, AB050533.1, BC008417.1, BC007641.1, AK026746.1, AB063084.1, AB063077.1, AF061795.1, AF151685.1, AF217991.1, BC008078.1, AK000486.1, AL050092.1.
					BG110420, BG115334, AI185642, AW611548, AI765744, AI049960, BF206049, AI884824, AI760384, AA603803, AI990152, AI991071, BF512789, BF111782, AI653741, AA425529, AW411097, AI934872, W87427, W38311, N46445, N81109, AI061327, AI500218, AI365116, AW235906, AA426444, AW590032, AA922999, AI675005, BE538807, D19613, W67792, AA515114, W67850, N79808, AA903500, BF310800, AI365322, AW675761, AA806029, AA856723, AI049728, AI653583, AA911610, R21297, AI040049, AI889471, AI368191, F08500, BE730105, AW196227, AI890737, BG258747, BE220526, Z39142, N70816, AA749162, AA258815, AA665599, T79989, AI193425, AI970238, BE781345, AI216679, F04714, W01450, AA349299, BE252937, AI696235, AI915010, R46143, AW937426, AA761144, N48946, Z43036, AA912452, BE177220, AW613925, BE543843, BF307683, AI472495, AI954525, BF821897, BF821009, AA937427, N64587, AF055012.1, AL050318.13, AB042646.1, DI6966.1, AC005157.1, AL080249.26, AL136313.27, AC002492.1, AL139415.10, AC020947.6, AC005412.6, AL109823.23, AL035413.19, AL021391.2, AC011742.3, AP002851.2, AC016601.6, AC007731.14, AL158040.13, AC010654.8, AC007272.3, AP001712.1, AL389888.8, AC007226.3, AC010326.6, U17296.1, AP001717.1, AL033529.25, Z93930.10, AL353812.13, AL356915.19, AL391827.18, AC004087.1, AC025593.5, AC007052.4, AC006285.11, AL118520.26, AC005500.2, AC011467.7, AL132777.4, AC005180.2, AL121601.13, Z99716.4, AC018644.6, AL022165.1, AP001745.1, AC002115.1, AL133545.10, AC009412.6, AL121751.12, AL136123.19, AC006965.3, AL121747.41, AC005052.2, AC005899.1, AF219991.1, AC010463.6, AC004089.25, AL356299.16, AL365505.15, AC006312.8, AC024563.4, AP001670.1, AC005971.5, AC013717.8, AC005081.3, AL121972.17, AC007934.7, AC007055.3, AC011737.10, AC006241.1, AL035415.22, AC005722.1, AL049780.4, AC044797.5, AL137792.11, AL359091.10, AL138836.15, AC004000.1, AC007237.3, AC008925.3, AL033392.5, AP001621.1, AC006211.1, AC018758.2, AP001693.1, AC005015.2, AL133485.3, AC007199.1, AC006084.1, AC011544.6, AP001716.1, AC008569.6, AL034420.16, AL049776.3, AC009004.6, AL049867.2, AP003357.2, AC012476.8, AF134726.1, AP001727.1, AC005098.2, AC008755.6, AL121653.2, AC006511.5, AC011475.6.
HFKEFG02	204	634743	1 - 781	15 - 795	BE222940, AI479528, AW242860, R46796, M62053, AI017670, BE048467, AI671740, AW001738, AA351031, AI206414, AF124373.1, AB009698.1, AF104038.1, AB009697.1, AF057039.2, AP001858.4, AJ249369.1, AF097490.1, AJ251529.1, AJ271205.1.
HFOXBI3	205	570699	1 - 1155	15 - 1169	BF592863, AW594700, AC090945.1, AC009508.3, AL390068.12, AP001422.1, AP000021.2, AP000162.1, AP001731.1, AC079950.23, AC005670.1, AL138690.19, AC010163.7.
HFPAC12	206	589522	1 - 1074	15 - 1088	AL520282, AI804338, BF951545, AW206420, AI039803, AI362891, BE699734, AA410892, M79026, AA419536, H47046, AA082306, AL520649, BF951672, BF944123, AW904559, BE702538, BF944119, AW954591, BE935929, Z45619, T79873, AB023185.1.
HFPAC071	207	629193	1 - 2053	15 - 2067	AU119532, AW976010, AV762220, BF792326, AV760760, BG164166, AL037632, AU117926,

AL135377, BG034591, BE538259, AV714931, BE541237, AV760723, AW188427, AV759172, AW965008, AU147226, AW833144, AU148007, AA526787, AA836811, AL138254, AW069819, AW955841, BE566072, AV760360, AV762022, AV759356, AV760364, AV759683, AW151713, AW576384, BG118507, AW440545, AV762001, AA527963, AW248523, BF381650, AV762779, AA782322, AW968205, AV759711, AV762900, AW406162, AV759682, AV762902, BF769434, AC027125.4, AC027129.5, AC090883.1, AF229123.1, AC011510.7, AL034549.19, AC002301.1, AC055120.5, AC006065.3, AC002115.1, AC010530.7, AC011464.5, AL135928.6, AL031680.20, AL137918.4, AC005899.1, AC005300.10, AL138743.5, AC007421.12, AC009220.10, AC006994.4, AC004890.2, AC005778.1, AC006483.3, AL022328.21, Z93023.1, AC005682.2, AC009144.5, AC007536.9, AC005696.1, AL034405.16, AC005520.2, AL139317.5, AC039057.8, Z93015.9, AL021397.1, AC011890.4, AC008267.6, AC004477.1, AC011471.6, AL009181.1, AC009087.4, AL139095.15, U95742.1, AC006064.9, AC001228.1, AC010378.6, AC004230.1, AC016772.8, AL136300.22, AL121886.22, AC006312.8, AL034402.9, Z84480.1, AL512430.14, AC025430.5, AL133246.2, AC007690.11, AC090939.1, AL445222.9, AC005324.1, AL109965.34, AC007688.15, AC004975.2, AC005512.1, AC008543.7, AC058791.3, AC004805.1, AC004841.2, AC004814.2, AL121655.1, AL360230.20, AC018758.2, AC007041.3, AC005052.2, AL096791.12, AL163279.2, AC002350.1, AC007308.13, AC005086.2, AL160175.5, AC004876.2, AL050349.27, AL359092.14, AC008264.10, AC010553.6, AL157877.11, AC005484.2, AC011475.6, AL161670.4, AC003029.2, AC019205.4, AL031311.1, AC007225.2, AC005920.1, AC010276.6, AL109805.14, AC011470.5, AC011462.4, AP001751.1, AL049709.18, AC011461.4, AC013467.8, Z93930.10, AC022415.5, AL035704.9, AL512641.9, AL023803.3, AL121753.30, AC005519.3, AC010469.7, AC072052.6, AC005081.3, AC008622.5, AC006449.19, AJ009612.5, AC011500.7, AC025280.4, AC034193.4, AC010326.6, AC074142.3, AC012450.9, AL024507.7, AC002563.1, AC024568.4, AC018636.4, AE006639.1, AC005822.1, AC005828.1, AP001760.1, AC005722.1, AL031427.15, AL049872.3, AC005755.1, AC005911.6, AL137139.9, AL160411.25, AL031281.6, Z83844.5, AL049760.26, AC007435.12, AL133448.4, AC023344.4, AL121658.2, AC011487.5, AC004408.1, AL121928.13, AC006452.4, AC003982.1, AC002418.1, AP001714.1, AP001716.1, U47924.1, AC010422.7, AL391834.8, AC002369.1, AC009137.6, AF196779.1, AC004167.1, AL391114.12, AC008569.6, AL353682.11, AL133477.16, AL355535.14, AC084865.2, AC011472.7, AC016739.5, AL138836.15, AC009004.6, AC020908.6, AL138706.9, AP000501.1, AC011495.6, AC012377.5, AC012627.4, AL078463.11, AP000032.1, AL391827.18, Z95116.1, AL391262.3, AC011490.7, AC008745.6, AC083863.2, AC004223.1, AL022324.1, AL139113.21, AD001527.1, AL157938.22, AL031984.13, AC002425.1, AL137012.6, AC007283.3, AC010789.9, AC078846.2, AL109921.21, AE000658.1, AC004103.1, AL031295.1, AL022311.5, AC004089.25, AL122035.6, AL355336.15, AL133545.10, AC005914.1, AC004030.1, AL121893.21, AL050333.18, AC004605.1, AL158159.14, AC005332.1, AC010363.6, AC007097.4, AL136418.4, AL139054.1, AJ009616.3, AL359552.16, AC005209.1, AL133245.2, AL136295.3, AL021878.1, AC018639.8, AC011247.10, AC005071.2, AC005562.1,				
---	--	--	--	--

						AC020896.5, AL356806.4, AL121891.22, AC004584.1, AC032011.14, AL132713.11, AC008753.8, AL116637.6, AL022315.1, Z85987.13, AP001759.1, AC00886.5, AC005412.6, AF121781.1, AL117381.32, AC007405.6, AC008403.6, AL355302.14, Z69666.1, AC090944.1, AC006480.3, Z93241.11, AC010320.9, AL139100.9, U91326.1, AL136305. 14.
HFPX09	208	130979 3	1 - 2199	15 - 2213		AL536594, AV721181, AL138260, AW182261, AW590515, AL1621238, AA992136, AI039940, AI240096, BF475263, AI989349, AA992473, T15408, AI918747, H05529, H46336, R4821, R45685, H12939, AA296979, H05383, H05384, C14158, AI802297, D45285, R14994, H10614, H46267, AF055636.1, AL157396. 9.
HFPX36	209	526635	1 - 782	15 - 796		AI085242, AI440117, BG012020, AA659232, AA131088, AC006160.9, AC006449.19, AC020904.6, AC018711.4, L44140.1, AP001760.1, AC004983.2, AC005529.7, AL135744.4, AC005527.3, AC083868.2, AC051619.7, U91323.1, AC008623.4, AC023510.16, AP001718.1, AC020916.7, AC018801.4, AL049776.3, AC006006.2, AL355343.18, AC067941.7, AC011731.8, AL356805.5, AP000501.1, AL139021.6, AC018828.3, AC006205.7, AE006467.1, AC007263.4, AL121658.2, AC005409.1, AC022415.5, AL121983.13, AC005089.2, AC020983.7, AC004491.1, AP001830.4, AL162615.13, AC009412.6, AL049709.18, AC018808.4, AL138741.13, AC022443. 4.
HFRAN90	210	520368	1 - 518	15 - 532		AV705871, AV702196, AW965899, AW950678, AW959842, AV727499, AV705836, AV709248, AV728351, AV705453, AV728953, AV727766, AW963219, AV705697, AW956780, AW958316, AV726243, AW958045, AW956792, AV703742, AV726617, AV727120, AW956797, AV727144, AV705340, AV721818, AW964578, AV708025, AV705221, AV685113, AV707804, AW963399, AI536138, AI535660, AW966491, AI557799, AV725783, AV655703, AA585430, AV701667, AV746191, AW957853, AV728973, AW963378, AW959956, AV661824, AV741949, AV753624, AV726270, AW950597, AV701071, AW962407, AV727361, AV738232, AW951204, AV726551, AV731131, AV726328, AW961409, AV724091, AV707353, AW953763, AV729557, Z28355, AI547039, AW950644, AW954994, AW963350, AW965898, AA170832, AV702345, AV727828, AW955629, AV729198, AW964540, AV707331, D61254, AW963631, AV688541, AV702601, AV703620, AV712504, AW952064, AV717687, AV715667, AW955719, AV728210, AW954141, AW961831, AV692516, AV702095, AV705319, AW957300, AW959059, AW958033, AV762741, D60765, AV651281, AV745417, R45895, AV727449, AV732203, AV732299, AV732336, AW950971, AW950004, AV730119, AV730216, AW949940, AV707733, AV730546, AV730062, AV730115, AV731078, AV732566, AV702146, AV730609, AV701283, R28735, R29445, AV752043, AV731977, AV725497, AV730781, AV731694, AV731043, AV730288, AV732002, AV723449, AV723273, AV732149, AV732155, AV732255, AV752443, AV701626, AI557264, AW961578, AV729378, AW962864, AW957318, AW950689, AW955905, AV684604, AW965730, AV709733, AV728818, AV699199, AW965749, AW967047, AV699182, AV699139, AW950531, AW952395, AV701183, AV728312, AV704490, AV728884, T18597, AV709555, AV727954, AV729076, AV701088, AV703972, AV731411, AV649758, AV658784, AV705185, AV702191, AV729348, AV728642, AV705548, AW949437, AV658448, AW961112, AV723874, AV730165, AV725432, AV701311,

					<p>AV728062, AV725568, AV729568, AV742757, AW964072, AV742025, AW966165, AV699136, AV662287, AV699123, AW949934, AV699125, AV699200, AV753956, AW949351, AV727490, AV699247, AV651519, AV699137, AV707020, AV707556, AV701320, AV704059, AV703213, AV701059, AV705710, AV731348, AV706318, AV725274, AV727152, AW958519, AW949390, AW952896, AW963011, AW949529, AW949327, AW951728, AW953804, AW961841, AV708717, AW958860, AW962978, AL359839.4, AC005087.2, AJ244005.1, D50010.1, AJ244004.1, D78345.1, AF144029.1, AJ244006.1, S81957. 1.</p>
HFTCU19	211	735139	1 - 1561	15 - 1575	<p>AL522686, AL532414, AL528017, AL525764, AL525713, AL517601, AL532413, AL517602, BE728855, BE728429, BE790819, AL522685, BF793544, BG035367, BG250928, BG248668, BE620516, BG261214, BF527519, BE744785, BG027945, BE875302, BG107554, BE272944, BE274274, BE728950, BG104319, BE272684, BF025761, BF568694, BE408005, BE892043, BE259455, BE728885, BE786141, BE272952, BE298531, BE263890, BF965267, BE786762, AW249086, AA773582, AW956716, BE896833, AW248651, BG028978, BE272544, AI301926, BE514887, AW958043, AA707330, BF116072, BE301937, AW328603, AW958038, BE546423, AI983484, AI336123, BE409785, AI094652, AA857454, AA534610, AI301124, BE218758, BE391518, AW026133, BE220235, AA039645, AI826760, BF132535, BG164328, W07685, AA143751, BE217896, BE042731, AW800820, BE265135, AA316625, BF897135, R80333, AA143714, BE965179, AI371146, AI299006, BE859048, AA181066, AI273416, BE265826, AW328604, AI033743, AA209410, AI862384, AI989356, AA574155, AA576758, AA625711, AI274171, AV749543, AA583179, R56497, AW664258, AI400307, R56369, AA084546, AW248447, BF675036, AA805796, AI914573, AI183317, AA969588, AA516078, AA181067, AW192448, AA976451, AA961148, R56104, H22843, AI264478, N80562, AI263748, BE272880, AA352369, AW953396, AA325435, BF569001, R62408, AA904367, AA211866, R62409, AA303270, BF095626, AA999773, AA917014, R38437, AW118274, AI150239, AA354306, H22844, AA355150, AA353139, BF799722, R80227, AA039646, AA321806, N40663, BG122562, AA321805, AI364445, R12864, AA295363, AA641448, AW901335, AI001853, AI221522, AA303866, R49878, AW247358, T16973, BE206478, AW015905, AA180189, AA862561, AA743072, AA346787, R56274, AA343417, AA180499, AA279741, BE546075, AW007931, AW297178, AA179782, AI421063, R49877, AA279823, AI274516, BF796689, AI525802, AA095578, AW855537, AC003665.1, AC008550.4, AB051618.1, AA192915.</p>
HFTDL56	212	695976	1 - 1825	15 - 1839	<p>AW959215, AL514484, AU143560, AF307337.1, X55019.1, X01719.1, X04759.1, X01717. 1.</p>
HFTDZ36	213	545726	1 - 1089	15 - 1103	<p>AV721599, BF732420, BF510533, BF508158, BF508241, AI638188, AW181935, AI758929, AW592730, BE967495, AA447514, AI078837, AV723652, AI218418, BF692673, AA884756, AI335250, AW118870, BE044339, AA426363, AV730822, AI868197, BF947599, AA927228, BF952754, BF952302, BF952504, AW905268, AW905266, BF952591, AI673798, BF952850, BF952505, AW905263, BF952750, BF952589, BF952851, BF952752, AA897687, BF572515, AW905328, BE699539, AI830527, BF952755, BF210822, AA431528, AA029326, H41714, AA437157, N53641, BE699547, AW905379, BE699537, BE796741, AW898982, AI218421, AF289076.2,</p>

HFVAB79	214	130073 6	1 - 1161	15 - 1175	AC067967. 2. AI640273, AV169432, BF939574, AW271996, BE465785, AA916007, AI935583, BF196453, AI478387, AW301652, AI474065, N73883, W03943, AI266027, AI241273, AI373364, T87063, T83618, AC069548.4, AF349540. 1.
HFVGE32	215	854545	1 - 558	15 - 572	BF362920, AL160269. 14.
HFVIC62	216	799525	1 - 1336	15 - 1350	AV648354, AV648120, AV719575, AV720522, AI207547, AI434618, AU145412, AV720302, BE463522, AI536648, AV718703, BE971199, AW772290, AV718420, AA705032, AV653985, AV648331, N68679, AV648215, AV648032, AW204828, AI276746, H55836, AV660303, AA995080, T88862, T72187, H55837, AV649505, T67491, AI521332, AC008014.5, AF305814.1, AK001053. 1.
HFXAM76	217	601402	1 - 933	15 - 947	AV699170, AV699125, AV699144, AV699136, AV662257, AW952432, AV662242, AV650031, AV662196, AV719825, AV719156, AV720062, AV720893, AV724349, AV699246, AV699147, AV724520, AV699197, AV699218, AV699247, AV662167, AV699119, AV699199, AV662268, AV662225, AV662149.
HFXDJ75	218	626114	1 - 1904	15 - 1918	AV652810, AV699123, AW963961, AV662272, AV699182, AV699246, AV699223, AV699147, AV645788, AV699204.
HFXDN63	219	553685	1 - 1012	15 - 1026	AV699204, AV699196, AV699199, AV725496, AW952432, AV652809, AW958904, AV662223, AV699218, AV719825, AV719156, AV720062, AV720893, AV648653.
HFXGT26	220	745381	1 - 1743	15 - 1757	BE736918, BE250577, BE616582, BE728115, BE615376, BE563291, BF793477, BG250960, BE386373, BF338817, BE531051, BF680445, BE385152, AU139668, BE883545, BG032917, AU120778, BF943073, BE899007, AW899342, BF803637, AV701925, AV706319, AU136531, AW957880, AW957801, AA307661, BF882363, BF217767, AA121877, AV732690, BF218444, BF203663, BE264980, BF957961, AI380547, AI34410, BF207674, BE061899, AA826146, AI133895, AA505043, BF733347, BE384186, AV730296, BE184422, H02956, AA583368, BE154390, AV742189, AA180023, AW276742, H92806, BF773043, BF815608, BF957954, AU116940, AA243106, BE304382, BF962070, BF811794, AA227286, AA715194, AA969742, AI003034, AA221018, T60641, BF592342, AA179694, AV749263, BE565499, BE566249, AA584467, AA504672, BE736970, AI918674, T07838, BE792178, BF197329, AW630075, H47099, AW515786, BE968449, H78916, AW865469, BF951636, AA317928, AA503299, AW963317, AA782913, AI440300, AW899603, H67930, BF238662, AW899527, H63688, AW962826, AL134062, AA359714, H71269, AV750972, AA356190, AA572768, T92166, T60713, AA491404, AA431655, T57502, AV683302, AV698434, BF929662, H71280, BF767788, BE617381, T62188, AW898213, AV715734, AW865403, AW872342, AV682563, AW898920, AI088102, BF812273, AA173218, AW023095, BF920075, BE898175, AA984544, BF759180, AA601152, AV697443, H53927, R01106, BF873657, R24107, AA225638, BF911201, AA657747, T97032, T98711, AA774178, BE220229, AA081887, AA312997, AW864780, AI557831, AI142016, AA577789, BE884391, H67786, BF857863, W22010, BE165736, AU127460, N41805, AW855025, AW999271, AA281292, AA133041, AA083246, AA568139, AV731015, BF829537, BF874267, AA232145, BE564886, AA418919, AV731611, T97044, BF871285,

				AI940708, BF763808, AW997042, AL118813, AA353087, T59997, AA434462, BF869361, AW845664, AA833581, T94924, AW845678, AA431294, BE010787, AW845665, AV731929, AA614154, T57455, T63143, BF877837, BF869076, AV729748, AV691164, BE568189, W22978, BF212724, BF002494, BF675027, T70833, AW962273, AL136772, AC018641.3, AC006500.4, AC013470.10, AC005248.1, AL133321.11, AC084356.22, AC013357.19, AL161797.10, AC010745.4, AL133391.5, AC022415.5, AC008770.6, AL049555.6, AC015723.8, AL135796.6, AC016749.4, AL139109.14, AC066584.6, AC004711.1, AC011503.4, AP000827.4, AL358975.8, AC022325.5, AL049828.3, AL096862.18, AC007128.2, AL354942.10, AL391152.3, AC006027.1, AL109659.20, AC073964.3, AP002022.1, AL157367.15, AL022578.1, AL163268.2, AF051934.2, AC016748.3, Z92844.1, AC018645.4, AL139232.13, AL031655.8, AL157775.15, AC007320.3, AC007023.3, AL359712.12, AL445590.4, AL022171.1, AC007221.2, AC015983.7, Z98046.1, AL161757.4, AL138961.17, AC003086.1, AL158153.10, AL354825.10, AC010148.13, AC019050.4, AC090954.1, AC024581.3, AL132985.4, AC010176.12, AC013751.6, AC007558.3, AC010634.5, AF279660.2, AL450169.1, AL031768.9, AL133153.3, AC008898.6, AC006355.3, AC012591.8, AC022443.4, AL022726.1, AL136441.16, AL136307.12, AL391478.14, AL139340.12, AL353741.16, AC007132.3, AC023795.18, AC073221.8, AC068323.8, AL139014.6, AC006203.1, AL162385.16, AL158093.8, AC006596.2, AC006385.3, AL357312.8, AF198097.1, AP001955.2, AC019155.4, AC010305.3, AL512428.13, AL078623.28, AL513264.8, AL163639.3, AL357092.4, AL161730.9, AC060232.5, AC004592.1, AL137000.6, AC002080.1, AC010143.3, AP001718.1, AP000194.1, AP000314.1, AL021877.1, AC002980.1, AC021017.4, AC006206.3, AC004053.1, AC025575.21, AL365367.10, AL445532.8, AL513128.11, AL356317.8, AL360020.15, AC008488.7, AL354802.15, AC004388.1, AL389889.11, AL355074.5, AC010722.2, AL513011.7, AL450345.6, AC016910.5, AP000742.4, AC004216.1, AC011594.8, AL360236.26, AC010585.6, AP000811.4, AB038490.1, AL158070.11, AC073308.4, AC020647.9, Z82195.1, AC002038.1, AC016711.9, AC007043.3, AL158206.8, AL022399.2, AC009301.3, AC006984.2, AC004000.1, AL356438.15, AC005344.1, AC008945.6, AC007313.3, AC000060.1, Z73986.1, AC027287.20, AL356601.14, AF280107.1, AC004056.1, AL109933.25, AC008551.5, AC009949.9, AJ277546.2, AC018741.3, AL162431.17, AC020644.6, AC069294.5, AC004694.1, AL157398.6, AC005798.10, AL118496.21, AF149774.1, AL358293.4, AC010104.3, Z98754.1, AC006002.1, AL118519.25, AC015522.6, AC018677.3, AC019041.8, AC073323.5, AC009623.6, AC018698.5, AC010348.4, AL590788.8, AL445932.12, AC009517.5, Z83745.1, AC002066.1, AC005019.1, AL117375.12, AL096817.12, AC006257.1, AP001376.4, AC069285.8, AC006362.2, AL137145.13, AP001818.2, AL359502.14, AP002768.3, AF172277.1, AC008550.4, AC008277.4, AC007538.5, AL138694.18, AC005024.2, AP000647.4, AC005690.8, AC076972.16, AC010338.6, AL359755.9, AL121595.5, AL442646.14, AL117337.25, AC012492.9, AL590964.8, AC006568.7, AL391260.13, AP001002.4, AL031586.2, AL079307.7, AF225898.1, AC084783.2, AC005172.1, AC009779.18, AL356378.17, AC006479.2, AL008722.16, AC003977.1, AC005392.1, AC018360.16, AL391065.6, AC009264.6, AC009332.6, AL133319.24, AL353573.10, AL355834.4, AC008943.6,

						AC074391.5, AC012442.7, AC024084.4, AP003467.2, AL096706.10, AL049792.11, AC006478.2, AC063956.7, AC046130.25, AL096704.8, AC021269.4, AL391867.5, AL353613.10, AC006371.2, AC009514. 2.
HFXGV31	221	526253	1 - 738	15 - 752		
HFXHD88	222	589523	1 - 1588	15 - 1602		AW002350, AV764465, BE158716, BF876961, AA724333, BE973589, AA812141, AW473455, T06754, AU159337, AA297769, AC005095.2, AL121869.19, AC007919.18, AC003954.1, AL161420.10, AL513264.8, AL035405.10, AC005038.5, AC016749.4, AC005548.1, AL031118.21, AC002553.1, AC004477.1, AL133545.10, AC008041.5, AC011422.2, AL353633.13, AC012005.4, AC005627.2, AL135841.11, AC027319.5, DI4813.1, AC009137.6, AC034240.4, AC005884.1, AC034193.4, AL031848.11, AC009412.6, AC008125.9, AC018808. 4.
HFXHK73	223	609826	1 - 1859	15 - 1873		AP001741.1, Z49918.1, AP001610.1, AC009399. 5.
HFXKJ03	224	505207	1 - 927	15 - 941		AI041718, AC006213.1, AC035150. 1.
HFXKT05	225	658690	1 - 1701	15 - 1715		AU124431, AW960435, BF525944, AA781090, AW514159, AW390483, AW965129, AW170237, AW582015, AI700395, AI079309, AW339256, AI140441, BE700940, BE842726, BE842730, BE700936, BE700869, AW581975, AI022857, AI903097, AI401014, AI379419, BE700861, BE700862, BE772035, AI434349, BE772040, BE772042, AW673336, BE700873, BE700876, BE842723, BF439588, BE700941, BE700945, BE700943, BE772099, BE700938, AA703354, N50989, BE772066, BE700937, AA719006, BE908235, BE772053, BE772081, H69547, BE700904, BE772059, AA574083, BE830929, BE772082, BE818955, BE818958, BE772101, AI251845, AI243536, BE772019, BF870875, BE818964, AW517983, BE700851, AI983670, BE772020, BF359589, H70004, AW820559, BE840628, BE700898, T63151, BG012510, R11344, AA305705, BE818962, BE840434, BE840457, AW752129, AA565124, BG010792, BF849721, BE772047, AI905362, AA731490, BE818915, BE772087, BE772018, BE772074, BF110884, R14845, BE772086, BE772015, AI983820, AA344670, AA889063, R07438, BE840445, C15468, T63006, BE170135, R09631, R06659, BE772017, BE836162, AI540442, BE830923, AI023272, AW868068, BE830919, AW868069, BE818892, AA324635, AW960971, BE818951, AW674579, BE832289, BF091071, AK001249.2, AB007936.1, AK027078.1, AL117402. 1.
HFXKY27	226	634161	1 - 931	15 - 945		AA483223, AA552843, AV762050, BF991286, AA623002, BF827410, AW193265, AI434706, AV759204, BE350475, AI270117, AV760937, BF217299, AV710066, AA610493, AI350211, AL041690, BF475381, AV764241, AV764307, AW673241, AV762139, AI192631, AA552856, AV763540, BF676536, AA468131, AV682003, AI368256, AI345157, AA649705, AI345518, AV760774, AA480772, AA521323, AI538433, AA644538, AL037683, AA577906, AA613227, AA503475, AW270382, AI355206, AW021583, AV759274, AA521399, AV761155, AA492166, AV735495, AI431303, AA490183, AW088846, AF330238, AA857486, AA493621, AV759382, AW438643, AA579362, AI610159, AA525790, AA507824, AV742057, AV763255, W60061, AV761786, AA644551, AI254615, AV735370, AW872676, AA649642, AA652057, AA984708, AA579736, AA682912, AA525824, AW238583, AW977303, AA470969, AI963720, AV734666, AV760624, AV762826, AA970213, AA908422, AI613280, BG150790, AV760777, AA834755,

					AW513362, BF668217, AA657535, AV761925, AA357937, AV730301, AV763971, AA491831, AI68846, AW731867, BE502107, AW517737, AV762558, AW238542, AA766151, AA862173, AA350859, AI619997, AA501418, AV702857, AA601355, AI634384, AF001552.1, AL354749.6, AL122015.17, AL163032.3, AF279660.2, AL034405.16, AL035699.4, AL365315.8, AC010269.5, AL022163.1, AL031661.28, AC090497.2, AC005084.1, D83989.1, X55926.1, X54181.1, U57007.1, X54178.1, U18391.1, U18392.1, U57006.1, U18394.1, X55925.1, U57005.1, X54179.1, X75335.1, X55932.1, AC020728.4, U18390.1, AC004887.2, M37551.1, X54175.1, U57009.1, U18395.1, AC006511.5, U18393.1, X54176.1, U57008.1, AC005521.1, AL135903.12, AC004662.1, AL158052.10, AC004525.1, X55923.1, AL136090.12, AL157955.5, Z22650.1, X54177.1, AL133332.12, AP001677.1, U18400.1, AC009481.4, U18396.1, AL121891.22, U18399.1, U57004.1, AP001696.1, AC002529.1, AC009950.6, AC005740.1, AL049745.9, AC006287.1, AC009498.3, AC034305.6, AC008168.3, AC004972.2, AC011938.4, AL031275.1, AC008962.8, AL139350.17, AL590621.10, AL050325.20, AC005913.2, AC010748.5, AL109755.14, AL157830.10, AC002303.1, AC009508.3, L47228.1, Z77249.1, AP000501.1, AC073138.3, AC006376.2, AC010482.7, AL049563.4, X55927.1, U18398.1, AC005274.1, U18387.1, AL139082.18, AL049539.21, AL138721.16, AL359393.9, X55930.1, AC008766.4, AL023281.1, AC009802.13, AC027345.4, AC002115.1, AC007272.3, AC008109.6, AC017078.8, AP002392.3, AL355578.4, AC018637.3, AL049713.20, AC004622.1, AP001700.1, AC009779.18, AC005158.3, AL162587.20, AF117829.1, AL163278.2, AC087312.8, X74558.1, AC007934.7, AL499604.9, U67831.1, AL354869.11, AL161935.10, AL589988.6, AC022335.8, AC022407.6, AC073910.20, AL356796.16, AL133415.12, AC008134.3, AL354751.7, AC016080.5, AL391478.14, AC011310.3, AC005544.1, AC005297.1, AC013264.4, AC003010.1, AC004491.1, AC002128.1, AC009311.3, AP001727.1, AL163248.2, AC087600.21, AL359012.7, AL022162.1, AL354716.9, AC022740.4, AC090886.1, AJ011930.1, AC090004.1, AL050333.18, AL590762.1, AC012410.9, AC009623.6, AC002091.1, AJ006995.1, AC006128.1, AP002532.1, AP003467.2, AC007970.3, AP000555.1, AL138759.20, AC012315.5, AC007179.3, AF149773.1, AL049613.2, AC008071.2, AL359380.16, AL354668.13, AC007132.3, AC084882.2, AC090710.16, AP002812.3, AC013242.7, AP002906.2, Z72001.1, AC004806.1, AL133344.28, AF195953.1, AC004865.1, Z92844.1, AP001533.4, AC004047.1, AC006375.4, AL137077.31, AL445663.10, AL133472.12, AF188030.3, AP002007.4, AL031390.4, AC008268.3, AP001683.1, AC008482.5, AC003983.1, AC017004.4, AL449265.13, U67829.1, AL109823.23, AD000090.1, AP000472.2, AP002026.1, AC016716.6, AL135786.17, AL353691.12, AC005399.19, AL020994.1, AL353800.10, AL158210.12, AP003438.2, AC016763.8, AC020698.4, AL357515.26, AF246928.1, Z94044.1, AF227510.1, AC008543.7, AC018809.4, AF077058.1, AP000567.2, AL357141. 8.
HGBFO79	227	422794	1 - 1524	15 - 1538	AL529939, AL529940, AL528803, BE735106, BE798231, BE745759, BF312738, BE877016, BF343676, BE727149, BE549483, BE902824, BE905952, AL045805, BF310548, BE735699, BG259719, BE909739, BG030614, AW151250, BE382644, BE293088, BE907275, BE902845, BE390391, BE617060, BE886529, BE888201, BF313296, BE897351, BG253429, BE515066,

				<p> AW732704, BF791531, BE409147, AA402631, AV708863, AA502644, AA724973, AA057574, AW957597, AV702553, BF973113, BG180500, AV702396, BE742746, AI755278, AA290638, BE903995, AI089475, AA887805, AI161001, BE392156, AI342640, BF245183, BF820884, AL079399, AA993506, BG105105, BE019281, AV723744, C06428, AI310732, BE904398, BE378151, AA676716, BF980925, AA402669, AA558203, W46517, BF155847, AA324688, BE794205, AA682577, AI086193, AA350920, AA410238, AA436330, AA430533, AW863222, AA477605, AA355049, W52276, BF972686, R98071, BE741396, AA430492, AI659749, BF089390, F31374, BF984040, BE909563, BF357217, BF357202, H54089, R84453, BE794934, R54514, BF357191, BF357182, BE544952, BE091550, AA329392, AA203205, W88866, BE799599, F05766, AI528802, R76898, AI828302, AI909292, R79667, U46298, U46408, AI783909, AA290651, BG027789, AA325152, R77063, AA419293, AA284571, W03246, AA433853, BE379015, AA344489, BF812320, BF993643, AI207133, T74861, AA477478, BF083007, AA776079, BF806431, BF806761, AA687586, BE074631, R79856, BE769336, H80942, BE769313, T93671, BE769337, AA432307, W47495, BF243313, BF332596, AA326252, BE769318, AW840219, N43759, BG007721, BE934503, BF360558, AI909265, F36499, AW899414, BE699889, AV735591, BF345660, W40292, AA960832, BE094772, BE645528, AI912787, BE769393, AI909264, N83578, AW899503, BE774020, BE699857, AA977993, AI656270, AI631977, BE138644, BG179295, AI859644, AW089006, AI349957, AI345005, AI635164, AI873638, AW193467, AW089275, AI348917, AI865289, AI345014, AI537837, AW411298, BE393551, AI623736, AW161202, AI873820, AA575874, AI520809, AI799540, BF726144, AW411235, AI916419, AI560096, BE875959, AI933992, BE872082, AA127565, AI345261, AW059713, AW411351, AA806719, AI336633, AI583578, AW023590, AW189301, AI345677, AI633061, AI340627, AI573026, AW409775, AW168503, AI590423, AI491904, AW083572, AI918554, AI344931, AL038575, AI470714, AI537643, AI582871, AI281772, AW302992, AA468418, AW074869, AI432570, AW083168, AA983883, AI863047, AI453199, AI929108, AA853213, AA853539, AW081383, AI348870, AI561356, AI631216, AL036652, AA494167, AI951516, AI355277, AI565172, AW366372, AW827203, AW152369, BC000655.1, BC009265.1, AC002094.1, AL110156.1, BC001655.1, AK025375.1, BC000348.1, BC008780.1, AL049466.1, AK027102.1, AK026542.1, AB055370.1, BC009311.1, AB055805.1, S77771.1, AL080140.1, BC009395.1, BC002355.1, BC004119.1, AF094850.1, BC001093.1, BC007198.1, BC008364.1, BC008938.1, BC000090.1, AL389935.1, AL136979.16, BC004883.1, AK025209.1, BC003587.1, BC002409.1, AL136845.1, BC008417.1, S76508.1, AF242525.1, AL133640.1, AF120268.1, AL117578.1, BC004333.1, BC008282.1, BC005678.1, AF104032.1, AL137476.1, AK026591.1, AF090943.1, BC007456.1, AK027182.1, BC008078.1, AL162085.1, AF146568.1, AL110224.1, AF207829.1, BC007375.1, AF276658.1, BC006480.1, BC001967.1, BC004362.1, AL080126.1, BC004310.1, AK024622.1, AB051158.1, AF218014.1, AK026626.1, AL136844.1, AB063093.1, AJ010277.1, AL050138.1, AL137521.1, AL359624.1, BC009403.1, BC001774.1, BC008070.1, AF218031.1, AB049629.1, AK024974.1, AB048974.1, AL137554.1, BC001098.1, BC003101.1, BC001206.1, BC001470.1, </p>
--	--	--	--	---

					AK026532.1, BC005007.1, BC003687.1, AL389978.1, AF067420.1, AF030165.1, AL359600.1, AL512689.1, AF217991.1, AJ406932.1, AL035067.2, AF261134.1, AK026592.1, S61953.1, BC008930.1, BC003683.1, AK027081.1, AL050277.1, BC004529.1, AL359615.1, BC004265.1, AL136644.1, BC004336.1, AB063079.1, AL080127.1, AL359623.1, BC004874.1, BC006411.1, AL122045.1, AL137705.1, BC004181.1, BC000077.1, BC002688.1, AK026749.1, BC006332.1, BC000051.1, BC002975.1, AL137526.1, BC004950.1, AL133093.1, AK026597.1, AL133645.1, AK025549.1, BC008280.1, AK025208.1, AK026947.1, BC007355.1, AL137538.1, AF094480.1, AK025798.1, AK000753.1, AL162062.1, BC007420.1, BC003656.1, AF285167.1, AL389951.1, AL137555.1, AK000647.1, X66417.1, BC001082.1, AC020956.6, AB049848.1, AF218023.1, BC005872.1, BC000570.1, AL353940.1, BC005890.1, AK024546.1, BC004533.1, BC008382.1, BC000799.1, BC000772.1, AL049464.1, AL122049.1, BC002365.1, AK025391.1, AK000432.1, D89079.1, BC002454.1, AL137271.1, BC004290.1, AF183393.1, AF159615.1, AK027146.1, AF126488.1, BC007556.1, AL110158.1, AF004162.1, U80742.1, AL133049.1, AB062750.1, AF081571.1, AY034001.1, BC003120.1, AL157480.1, AB048964.1, AL049460.1, AK026164.1, AB050421.1, AK026797.1, AL157479.1, BC004324.1, BC007517.1, AL136843.1, BC000317.1, BC006198.1, AL137711.1, AL136789.1, AL136768.1, BC003602.1, AF274348.1, AL133062.1, AK000206.1, AF274347.1, AL137547.1, AL442082.1, AL136748.1, AL359620.1, BC007199.1, U72621.3, U38847.1, BC002750.1, AL035587.5, AC007298.17, AL080124.1, BC000007.1, BC004960.1, BC001418.2, BC004905.1, BC003651.1, AL133054.1, BC005015.1, BC004349.1, BC003104.1, AK026374.1, BC003573.1, BC002839.1, AB060893.1, AK026522.1, BC006408.1, AB060905.1, BC007255.1, BC003110.1, BC006106.1, AB047941.1, BC006440.1, AL122111.1, AL133098.1, BC001963.1, BC007641.1, BC007571.1, BC006472.1, AF305835.1, BC004431.1, AL137574.1, AF082324.1, BC003548.1, AF205073.1, AF188698.1, AL389947.1, AL133077.1, AL050146.1, AL442072.1, AL157431.1, AL133014.1, BC007897.1, AY026527.1, BC006412.1, BC006133.1.
HGBHE57	228	566836	1 - 649	15 - 663	BF591002, AI491940, AI239822, BF440034, N20580, AI263983, AA526882, AI811694, AI080116, AA046053, AA902625, AL536055, AI361914, AA622321, AI421561, AA508633, AW661932, D20772, AW952992, N67184, AA526869, AI598052, H64253, AA282273, BE618852, AA811240, AA345238, AW732176, H17050, AI061405, H23158, BF592162, T80830, H09571, R53226, AA046179, BF759956, H25064, T86412, BE890120, H09750, H21812, AW379527, AA249340, AL514791, AL514473, AI863382, AL513817, AL513991, AL514511, AI499178, AA765198, AI401697, AI434731, AI863002, AI440238, AL121286, BG163646, BG117249, AW196720, AW955902, AL039287, AL513693, BE965000, AI564212, AI971587, AW051088, BE883591, AL513977, BE966443, W45039, AI619820, AW088717, BF793561, AI696714, AI491842, AI890887, AI421662, AI471429, AI479292, AW021464, AW087217, AI925502, AI524654, AI961631, AL037104, AI250821, AI453767, BG108070, T69241, BE910033, AI439962, AI434468, AW090736, AI568967, AI432532, AI251221, BG119855, AI478714, AI784214, AI553645, AI470717, AI690813, AW194014, AW128971, AW105431, AI435641,

					<p>AL514357, AI866469, AW188525, AV747571, AL514493, AI648699, AA282824, AI432942, AI581033, AI699020, AI658566, AI698391, AV736995, AI874238, AI538564, AI568293, AI915291, AI220828, AI635634, AW152182, AI804586, N25033, BG029058, AW004606, BE393784, AI590043, BF811804, AI889189, AW104141, AI473536, BF669151, AI688918, AI539260, AI439664, AI571699, AI049856, BF752997, AI349482, AI139104, AI061180, AI884318, AI638644, AI491710, AI370623, BE962571, AI872118, AA761608, AI699823, BG122005, W74529, BE541445, BE877065, AI701097, AI871660, AI499570, AI281653, AI263584, AI679388, AW044386, AI359744, AI364167, AI538055, AK026243.1, AK000359.1, AF126245.1, BC001964.1, AF232009.1, AK027224.1, AL136889.1, AL389935.1, AK000414.1, AL050393.1, AL137537.1, AK025117.1, AF218006.1, AK026855.1, AK026542.1, AL117460.1, AK026556.1, AL122100.1, X72889.1, BC008364.1, AB060897.1, AK027204.1, AK027144.1, Y14314.1, AK025258.1, BC004264.1, BC003056.1, AL080139.1, AK024944.1, AB047930.1, AJ299431.1, AJ401156.1, BC006458.1, AI389982.1, BC003548.1, AK026462.1, BC002516.1, AF267739.1, BC007905.1, BC003614.1, AL137530.1, BC003101.1, X99270.1, BC002970.1, AL137533.1, X68560.1, AL137548.1, AL137292.1, AC002471.5, AC005374.5, AL136748.1, BC002733.1, BC007304.1, X82434.1, BC002365.1, AK027093.1, AB060834.1, BC003590.1, AL353940.1, BC007034.1, BC008591.1, AK027103.1, AF103804.1, AK025435.1, AF060555.1, AK026038.1, BC007796.1, AL136825.1, AK026570.1, AJ296345.1, BC005825.1, BC004292.1, AK000418.1, BC003573.1, BC000001.1, AL117587.1, AK000636.1, AB056421.1, AK000074.1, AF339775.1, AB050431.1, AL583915.1, BC008078.1, X66975.1, AL136805.1, AK027111.1, AK027099.1, AL137478.1, BC002877.1, AB063074.1, BC000074.1, AL133653.1, AJ012755.1, BC002958.1, AL117438.1, BC002914.1, BC007241.1, AL117416.1, BC002967.1, AL390184.1, AK024855.1, BC004336.1, AL133623.1, AF082075.1, BC005070.1, BC003410.1, BC005402.1, AF353396.1, BC008781.1, AK024992.1, AF245044.1, AL122104.1, AK026744.1, BC006157.1, BC001652.1, BC006345.1, AL110158.1, AL136752.1, AL133665.1, AL049447.1, AL133637.1, AF218005.1, AB048919.1, AK000266.1.</p>
HGBIB74	229	837220	1 - 1802	15 - 1816	<p>AU132073, AL514534, BF983632, AL526111, BF793202, BF816636, AL526167, BF207035, AU121857, BE312932, BF307465, AL528311, BF316637, BE878180, BF512924, BE781366, BE299008, BE866833, AU141579, BF307539, BE296624, BF203318, BE314690, BE247312, AA258714, BF203434, AA258479, AW602250, AW372226, BF358908, AA625114, AI337232, BF762063, AU134960, BF303835, AW372227, AU125523, BE840047, AI739102, BE696707, AA551238, AA505288, R52096, BE746044, AA853934, BG012508, AI936957, AI582908, BE245999, R46499, BF365473, BE296121, AW166753, AA770298, BG056533, AA481002, AW071542, H17104, AW007814, AI086723, AI338746, AI340064, AI094613, AI096869, AI922132, BF939399, BE855621, AI357394, AI423481, AW087313, BF475441, AI421759, AI356823, AI418892, AA287330, N94480, AA524286, AW005778, AI922862, AW191028, AI5666341, AA470698, AI421557, AI361016, AI359797, AI362874, AI863909, AI880712, F09352, AI922424, AA873767, AA481480, BF447091, AA291405, N20109, AI263664, AW968514, AA570059, AI913894, BF057036, W94068, BF090405,</p>

					AI381877, AI193950, AI364237, D54296, AU149162, BE828094, BF751874, AA789159, AA853935, AA482101, AI360188, AW952710, Z40719, AA400811, AI539565, AA629142, BE813293, AA095376, T58139, AU147592, AI214242, AI034063, N31573, AI040574, H43298, BF753185, AA953460, AW131152, AV706318, AI146352, AI648405, AA921717, AW054979, AI445988, AI888216, BF432411, AI271977, R22588, AI360977, AW188664, AW516744, AI085523, AW057831, AI613427, AA679957, AA524336, AW993553, AW375413, M79269, AI598125, BF819300, AW993667, AI083784, H65453, AW136876, BE964668, AA421021, F30056, AL515965, AI078721, AL515964, BG060060, AA701072, BF805411, BE815632, BF872254, BF752405, BF527514, W94067, BE762789, W23927, BF206436, BF527026, W22794, BF772933, AW265783, BE707365, AA480986, BE259841, BE876343, BE697298, D87444.1, AL049539. 21.
HGLAL82	230	520261	1 - 392	15 - 406	AL117344.12.
HHAAF20	231	838603	1 - 1481	15 - 1495	BE562242, BE782638, BE542785, BE871376, AW962260, AW118853, BG163298, AU151024, AW956135, BG254474, AI014552, AU153853, AI128005, AI304951, AU151709, AU123132, AI806634, AI554797, AA864943, AU151959, AW956137, AW731743, AI023423, BG150021, AI859224, AA001739, BF725954, N51229, BF476487, AI206406, AI422749, AI888568, AW511373, AW966806, BF110112, AA776417, AW192477, BG027748, AI161044, BF913352, AI306577, AA878001, W37987, AA587858, AW072232, AW451522, T57196, W37988, AA477029, T94775, AA022682, N24284, N32175, BE696738, BE857520, AI022374, AA527439, AA282898, AI538443, BE703950, AI208820, T55949, AA022801, W79912, W02715, BE041622, AI420754, AA911458, AA813028, H80241, W78127, BE221072, AU156435, AA843339, AA309975, AI276411, W03712, AA321763, W27545, BF887745, AA548566, AA339184, W25734, T94024, AA370906, AA001808, AW020249, H56404, BF926153, AI499535, AI869412, R22900, AI828446, BE241440, BE243664, AJ293456, AI146581, R23002, H56188, AI824776, AA321910, M85881, C01054, AA872708, BG166236, BF942843, BE541266, BE158250, AA971014, AI243389, BC000978.2, AK022524.1, L39210.1, AK000266.1, L33842.1, AK025013. 1.
HHBCS39	232	100302 8	1 - 2881	15 - 2895	AU118319, AU118145, AA001321, AI268416, AU144910, AA004368, AW291988, AU144790, AA677418, AI056605, BE708494, AA001908, AA707413, AA903931, AA004369, AA122399, BG000061, AA152481, AA878867, AV695708, AA152372, AI279749, R28072, AI446406, AI565299, T82947, R28288, AA346924, T97751, T97858, AI242583, AW839578, AK024922.1, AK021612. 1.
HHEAA08	233	638231	1 - 2136	15 - 2150	AL520596, AI370425, BE567612, AI343143, AI016704, BF678494, AI284640, AI952900, AL038606, AW302048, AI049996, AW500125, AA318267, BE139267, AW979140, AA484143, AV763401, AW021774, AI345123, AW302315, AI754661, BF725347, AV762129, AL039187, AL079734, AI344810, AV763657, BE676900, BE139358, AI045077, AI192228, AW069227, AV710066, AV758989, AL526288, AA528480, AW303196, AW088125, AI270117, AA491814, AW301350, AA448838, AI538812, AL041706, AI918013, AV682003, AI754291, AU154948, AV760937, AW419262, AV728928, AW833862, AW731867, AW238016, BG031290, AI696793, AA524832, AA601680, BF926429, BF916934, AI473701, F32710, N91310, AA730635, AI634187, AW193265,

					<p>AW504224, BG033217, AA167055, N22032, AV755512, AL046409, AC016601.6, AL121988.10, AC010219.4, AF235097.1, AL035450.1, AL132986.4, AL133260.12, AC004000.1, AC005291.1, AL031431.8, AC009087.4, AF130343.1, AL138880.14, AC007036.3, AL132987.4, AL031719.12, M69197.1, AE006467.1, Z85996.1, AC012076.4, AL035400.13, AC007564.9, AC006206.3, AL449212.1, AL158830.17, AL356378.17, AL049569.13, AL031584.1, L78810.1, AL121845.20, AC007566.2, AC011465.4, AC005540.4, AC025572.13, AP001713.1, AC002352.1, AC007193.1, AL139092.12, AF001549.1, AL121865.7, AC010458.5, AL121895.26, AL133415.12, AL121657.2, AL389921.12, AP00100.1, AL031727.42, AL161747.5, AC008395.6, AL353140.12, AC073593.13, AL157828.14, AL157398.6, AC079141.7, AC006952.6, AL034431.16, AC078962.30, AC008882.6, AC009228.4, AP001694.1, AL121899.37, AC005697.1, AL160273.9, AL031291.3, AC008745.6, AL137859.3, AL161896.16, AC007055.3, AL121910.26, AL117328.5, AL450169.1, AC005768.17, AP000208.1, AP000130.1, AC005071.2, D83989.1, AP002008.5, AP000247.1, AL353613.10, U95740.1, AC002045.1, AC006057.5, AC009314.4, AC008747.5, AF279660.2, AC004231.1, AC078961.23, AP001725.1, AL035089.21, AP003357.2, AJ003147.1, AL359739.8, AL352984.4, M55538.2, AC005304.1, AC079045.2, AC004522.1, AF241728.1, AC007221.2, AL161937.13, Z82097.1, AF069291.1, AL110114.1, AC008482.5, AL109615.41, AL391122.9, AC018618.5, AL161421.11, AL049869.6, AC010489.4, AC005007.1, AC083870.2, AC006285.11, AL158035.14, AC007198.6, AC078876.15, AF243527.1, AL391280.15, AL031681.16, AC016025.12, AL160410.24, AL138762.20, U93305.1, AL031985.10, AL121754.18, AC008394.3, AC007161.1, AL590732.7, AC022212.4, AP002851.2, AL356321.9, AL008708.4, AL359846.11, AC006270.1, AL050349.27, AL445483.13, AC005325.1, AL353748.13, AC009955.4, AC002381.1, AL122004.17, AC009230.3, AL049776.3, AP001710.1, AC008547.5, AC008555.5, AC005520.2, AC002565.1, AL031176.8, AL138741.13, AC005678.1, AC004590.1, AL133551.13, AC009238.4, AC007673.7, AC008872.5, AJ289880.1, AL096793.20, Z85987.13, U57009.1, AC004890.2, AC005822.1, AL590762.1, AL160237.4, AL391684.6, U91326.1, AC083875.1, U96629.1, AP000426.3, AC013429.12, Z98051.6, AL031055.1, AL049758.11, AC004826.3, AL355096.4, AC009309.4, AP001830.4, AC008755.6, AC007749.3, AC005887.3, AC002395.1, AC002418.1, AC010504.7, AL161627.13, AL118511.25, AL139317.5, AL442203.12, AC004386.1, AP001972.4, AC016830.5, AC004832.3, AP001614.1, AC004846.2, AL035685.21, AC005701.1, AL132713.11, AC007465.4, AC005669.1, AL352976.3, AF134726.1, AC006052.5, AL133328.13, AC079684.16, AC011739.7, AC016027.15, AL359851.19, AC078958.30, AC022173.7, AC011359.5, AC006026.2, U57007.1, AL139100.9, AL445675.9, AL445258.4, AC009470.4, AL133324.13, Z82194.1, U18391.1, AC002316.1, U18394.1, AL356801.5, X54176.1, AP001781.4, AL135907.21, AL353734.12, AL031963.40, AL133338.8, AL135744.4, AL121601.13, AL359813.23, AP000036.1, AC009464.7, AC004812.1, AC018710.4, AL160192.3, AC026463.4, AL109825.23, AL121902.13, AC019041.8, AC079602.15.</p>
HHEMA59	234	823100	1 - 3088	15 - 3102	<p>AV726528, BF574791, BF996057, BF990910, BF035428, BF695329, A1096792, AW977965, AA811457, A1742527, A1820061, A1921596, A1984225, AW961815, A193746, A1573202, BF970504,</p>

					AI245917, BE670178, AI283174, AW043715, W74699, AI174605, AA810908, AI367927, AI285046, BG117412, BF338708, AI357298, AA215462, BF810183, BE927671, AI334340, D62083, T32812, N70003, W74737, BE927668, BE568242, AA463313, AI880873, AI039073, AA862480, D61879, AA130296, H70799, AA215463, Z45087, Z40816, T60267, R76519, AI157633, AI264491, T32813, R81074, AW089194, BF088910, R80967, H70800, N62108, R76520, BF356673, BE940685, AW900254, AI885935, AI370183, BF925069, N78339, H60031, BE935677, T61647, AI136527.9, AB014529.1, AF176555. 1.
HHEMA75	235	494099	1 - 851	15 - 865	AA464839, BE269516, AW470830, AI808512, BE907567, BF381742, AW044532, W20358, AA780196, BE894120, AA450310, BG115487, BE767266, AW504536, AA243525, BF248139, AI218646, AI358214, AC008154.6, AC018646.3, AK027726. 1.
HHEMM74	236	941955	1 - 2598	15 - 2612	AI912020, AI738591, AL530623, BF000400, AI673200, AW195629, BF590333, BE465055, BF342074, AW207103, AI914327, AI016102, AI948562, AA515654, AI858984, AI021976, AA824295, AW003109, BG106995, AI288261, AI332790, AW873004, AA447206, AI863407, AW271426, BF222197, AI673222, AW274813, AI093417, AW197033, AA846300, AI989749, AA917651, AI933079, AI198249, AA149282, AW337461, AA029228, AU120416, N89854, AA476264, AI650694, AV760466, AA805734, Z28929, AV762395, AL042753, AI862408, AW137892, AW250017, AV759518, BE744242, AL138455, AV762645, AW582878, H43959, AI679782, AA029227, AL043009, BF337291, AA078301, AV682003, AV763971, AV720371, AI400383, AL042853, AL138265, AI971136, BG116267, BG116323, BE774842, AL043718, AV733824, AL079812, AI284640, AW954829, AI133164, AF039185, BG249643, AW301350, AV762098, AI805607, AW303196, AI334443, AV763633, AI499938, H01583, AL037683, H01483, BF677892, AL041690, AV760391, AF330238, AA587604, AL046409, BE893169, AW274349, BF241967, AL048626, AL045053, AV761745, AA631507, AL040921, AI963720, BG116150, AV761362, BF690726, AV760389, AV764530, AI307608, AV763540, AL119691, BF668217, AV759704, BF676981, AV759204, AV762959, AU140493, AU147104, AI431303, BF680074, AA581903, AI270117, AW812477, AW965008, AV710066, AW021583, AW088846, BG059568, AW072923, AW193265, AV728425, AA610491, AW419262, AW518220, AI613280, BF475381, AA129446, AV760777, AA594725, AV725423, AV762139, AV760937, BE562953, AA723017, AL039996, AI254316, AI281881, AL042377, AW576391, AI350211, AW995093, AW502975, AW574794, AW188484, AV763354, BF311000, AV733830, AU118745, AA490183, AI708009, AI610920, BF697673, AI862409, AA563926, AV757607, AV735495, AI305766, AA584082, AW406447, AI192631, AV740801, AL046205, AW270270, AV742057, AI367497, AI537506, AV762050, AV761489, AW245747, AI457397, AA577906, AV764329, BE252421, AI076616, BF792268, BF965232, BF965007, AW276827, AU152722, AW265385, AI345654, AW662543, AW969629, AI097429, AL134972, AI754955, AV756220, AI821271, AI537955, AW501386, AV658688, BF918590, AL120687, BE150580, AI924251, AV735370, AV763255, AV764228, BG236735, AV762111, AL044940, AV764578, AI732865, AW960468, AW974109, AI370074, AA547979, AI625244,

				<p> AV764398, AW276586, BF919090, AC004084.1, AK025420.1, AK026441.1, AB011110.2, AC008569.6, AC005696.1, AC009996.7, AP001717.1, AL160269.14, AC008372.6, AL355543.13, AC009756.9, AC009412.6, AL139317.5, AC000025.2, AC005015.2, AC005077.5, AL132768.15, AC009516.19, Z85986.1, AF053335.1, AC006329.5, AP001695.1, AC006480.3, AC007318.4, AL359091.10, AC004963.2, AL023284.1, AC011497.6, AC004686.1, AL138724.12, AC011495.6, AC068724.7, AC012476.8, AF196779.1, AC005081.3, AC008610.6, AL139415.10, AP003357.2, AL022721.1, L44140.1, AL035367.5, AC010789.9, AC012170.6, AC010319.7, AP001688.1, AL163249.2, AL139330.17, AJ003147.1, AC021016.4, AC020904.6, AC005839.1, AC004166.12, AC007055.3, AL353807.18, AL161747.5, AC008543.7, AC004089.25, AC010326.6, AC011811.42, Z93017.6, AC004832.3, AC004638.1, AC019205.4, AL133367.4, AL133477.16, AL049759.10, AC011475.6, AL354707.17, AC002350.1, AC005695.1, AJ300188.1, AC009220.10, AC005291.1, AC005821.1, AC025594.5, AP001670.1, AC005037.2, AC005670.1, AL118520.26, AC004019.20, AC011442.5, AC009228.4, AC006285.11, AC005520.2, Z99716.4, AL117381.32, AC020906.6, AL356299.16, U91326.1, AC002565.1, AJ400877.1, AL109804.41, AC068533.7, AC009144.5, AC005940.3, AC022211.5, AL133284.13, AC009137.6, AC006241.1, AC006965.3, AF131216.1, AF334404.1, AC003037.1, AC008280.4, AC008403.6, AC008481.7, AC008567.4, AC006449.19, AL121601.13, AL133174.15, AJ312686.1, AC026464.6, AP001725.1, AL583856.6, AC044797.5, AL135839.15, Z97054.1, AP001714.1, AL035587.5, AC022150.5, AL096840.25, AC007193.1, AL162231.20, AC002316.1, AC008760.6, AL445686.14, AC007227.3, AC006435.7, AC006960.1, AC087071.2, AL138784.30, AC010654.8, AC005911.6, AL354932.26, AC005914.1, AL021878.1, AC005052.2, AL160471.5, AL034380.26, AE006463.1, AC024028.10, AL096841.6, AC008812.7, AC025262.27, AL121890.34, AL049776.3, AL022163.1, AC006211.1, AC078878.20, AL136137.15, AC007991.7, AC005527.3, AL035458.35, AC005837.1, AP001748.1, AP001671.1, AL590763.1, AC007546.5, AP001753.1, AL590762.1, AL135927.14, AL158830.17, AC016025.12, AL022238.1, AL050335.32, AL121972.17, AL031283.26, AC008491.6, AC084881.19, AC069548.4, AC005231.2, AL161656.20, AL445222.9, AL049795.20, AL135901.23, AC004453.1, AL109935.39, U95742.1, AC005620.1, AC007298.17, AL352978.6, AL109797.18, AL356915.19, AL162426.20, AL139809.16, AC011487.5, AL023553.5, AC067941.7, AF129756.1, U80017.1, AC004821.3, AC010458.5, AL354720.14, AL096701.14, Z69666.1, AL031587.3, AC002549.1, AC026172.3, AC011816.17, AC004840.3, AC011448.3, AC010271.6, AL133485.3, AL133448.4, AL160237.4, AC011479.6, AC005488.2, AC022596.9, AC007666.12, AC006483.3, AC006512.12, AC008519.4, AC007005.3, Z83844.5, AC084864.2, AC005778.1, AL133551.13, AC005971.5, AL020993.1, AL121891.22, AL391827.18, AC027125.4, AC025593.5, AC005295.1, AC024561.4, AC012306.11, AL096767.12, AL157372.18, AB038653.1, AC006251.3, AC018644.6, AC005086.2, AC018808.4, AL033521.2, AC005562.1, AC004867.5, AF001549.1, AC004965.2, AC005519.3, AC007676.19, AC008115.3, AL513008.14, AC009263.6, AL136418.4, AL139054.1, AC000360.35, U62293.1, AC010378.6, AC027644. 9. </p>
--	--	--	--	--

HHENQ22	237	589958	1 - 1885	15 - 1899	
HHEPD24	238	498227	1 - 224	15 - 238	
HHEPM33	239	877639	1 - 1445	15 - 1459	AL525047, BE267465, AU119027, BE728398, AU142237, BG034269, BE797542, BG110205, AL525046, BF446035, AW966408, BE695857, AA447885, BE261226, BF852227, BE858413, AU159593, AV749929, BG178599, BE856576, AA424770, AI338990, AW135009, AI423774, AI334334, AW959286, AI766429, AA417903, AA933079, AA424903, AL047160, AI685395, BF477465, AW139987, BF948688, BF745006, AW769824, AA641849, AW371401, AW371406, BF745011, AW613024, BG056135, BF744933, BG058480, AI203035, BF744994, BE828620, BF744932, BF744930, AI250926, BF760364, AA593807, AI969741, AI263347, BF744931, BF745007, AA383851, AA482522, BF745014, AI686024, AA447724, AW613546, AW614328, AI766856, BF995409, BF745010, AA644474, AW197307, AA641850, BF852819, AA383850, AA325769, BF955849, AK023968. 1.
HHEPT60	240	463027	1 - 518	15 - 532	AW135036, BG231414, AV743105, AI420838, AA535125, R16804, AI497603, AA813296, AA552195, BG236687, BG231242, AA504055, AA533150, BF971602, AI143324, BE907116, BF971381, AI475621, AW975063, AV760867, BF026034, AV710618, AA578143, BF306800, AV716075, BE881501, BE888689, AA729466, AA628531, AA482870, BF527622, AV662287, AV761533, AI582791, AI741580, AV701482, AV739097, BE257844, AW083024, AW203954, AA523344, AA532593, AV756558, AI497618, AW958877, AV762499, AA558231, BG059296, AI475653, BG231063, BG231145, AA514368, AI524728, AV738333, BF340078, AI589583, AV762734, AV703106, AW955488, AV737930, AV717668, AV755789, AV762182, AV755769, AV701025, AV762924, AC010451.7, AC016993.4, AC018684. 3.
HHEPU04	241	838217	1 - 1070	15 - 1084	BG034488, BF982559, BE794497, BE313144, BF314688, BG120997, BE910635, BF969005, BF340441, BF306972, BF525733, BE875593, BG030710, BF792430, BE262728, BF315735, BE314135, BF205034, BE276651, BF203164, BE387269, BE266232, BE391657, BF204545, BG027046, AA643840, BE260130, N63475, BF195525, AA205661, AI832232, BF058723, AI869318, W72049, BE018923, AI765058, AV687411, AA034035, AA553820, AW961121, BF304202, AI808064, AW026472, AI955852, AI765242, AW248507, BE393296, AI127262, AI277854, AI884693, AI073710, AW872762, AI376148, AA146971, AI765029, AI339947, AW024138, AI147240, BF061732, AA708126, AA813521, AW439832, AI694928, AW242703, AI498928, AI123913, AA836303, BG222313, AA156956, AI301956, AI347608, AI311112, AI268993, AI304651, BF435947, AI075899, AI560747, BE295615, AI346935, BE669425, BF195494, AW839917, W79426, AV687766, AA781466, AI342962, AA033915, AW136724, AI090370, AA625788, AW800090, AA709462, AI338271, AW079287, R47883, AI969210, AA399114, AA041385, W46277, H99183, AA770182, H94295, AW404352, AA741397, N23743, AA044694, N24466, AA974145, AV683814, BF889167, AA156864, AA398056, N40747, N35718, N94773, AW968213, AA146970, N30038, BE140096, AA468399, AI341986, AA708782, AI686517, AA704970, AI597845, AI038344, W76401, AI374736, H81310, AI497678, N32448, AW204374, AA868201, BG152852, AI291572, AA478165, AA468439, AA478010,

AI423158, AA707176, H81366, AI219428, R47882, AA127044, W95282, AA298982, BE928658, AI203479, N36015, AW243034, AA041191, W94777, AA993215, H94190, AV661716, AV708035, AA704288, AA991336, AA745913, AW204258, N59833, BF081714, AA025410, R06215, AI357603, AA298843, AA513969, AI379942, AI357554, AW000874, AA125766, BE645626, F27351, AA935742, BE833225, H45882, AA542901, AA564888, W79326, AA296786, AA564958, AA970265, AI761938, F30350, AI762149, AA041429, AI220792, AI869708, AA297517, AW188811, BE312203, AI919010, AW235465, AW090329, AA298624, AA298368, BF591489, AI956005, AA041425, AA298370, BF311814, AI749204, AI867544, AA296693, N44247, AI887211, AA045652, AI369692, AI365332, AA029123, AI566992, AV687884, AA918262, AA846379, AI269986, R36822, AI915437, AA297475, AV687881, BE090937, BF889173, F30226, AA205774, N76364, BF750936, BE066853, AI345416, AI345612, AI345415, AI251221, AL039086, AI345010, AI307569, AV739365, AL036509, AI349957, AI345005, AV743129, AI345688, BE138658, AI345608, AI340511, AI345471, AI348901, AV736808, AI345739, BC002911.1, BC000828.1, BC000215.1, AB063079.1, BC006119.1, AF112208.1, BC004265.1, AL512719.1, AB055366.1, AF132676.1, BC006458.1, AF061836.1, AL110218.1, AL136767.1, AF230402.1, AC002467.1, AL389935.1, BC007534.1, BC007920.1, BC004899.1, AL137529.1, AL137480.1, AL359620.1, AF217982.1, AK000421.1, S7771.1, AL133640.1, BC001045.1, AB060226.1, BC008037.1, BC005843.1, BC001778.1, AL161953.1, BC008282.1, BC002370.1, AL050138.1, AK026534.1, BC000632.1, BC008899.1, BC003587.1, AK026959.1, AL096751.1, AB060229.1, BC008382.1, AF090934.1, AK024588.1, BC005805.1, BC001128.1, U55017.1, X67688.1, AL136893.1, AL133075.1, BC004131.1, AK025015.1, AB063087.1, AF069506.1, AB044547.1, AL359623.1, AL136615.1, BC005168.1, AK027173.1, BC007241.1, AB048974.1, BC003602.1, BC001675.1, AL133049.1, AK024570.1, AF225424.1, BC001215.1, AK027213.1, AK000310.1, BC001056.1, AJ296345.1, AL137284.1, AL137547.1, AK026857.1, AL137478.1, BC006481.1, AL137459.1, AK026613.1, AB063088.1, AK025465.1, BC002491.1, AF003737.1, AB050411.1, BC002809.1, AB050533.1, AB060903.1, AL110221.1, AL389939.1, S76508.1, BC004943.1, AK026647.1, AF094850.1, AL133067.1, AL157480.1, AL049283.1, BC004370.1, BC004924.1, AL117457.1, AL157431.1, BC007732.1, U95738.1, AK026600.1, BC005002.1, BC008185.1, AL162002.1, AK024524.1, BC009026.1, AF358829.1, BC008649.1, AL050277.1, BC008488.1, BC007255.1, AB047941.1, Z82022.1, AK000655.1, AK026452.1, AF321617.1, AL133112.1, BC008708.1, BC004960.1, AL137627.1, BC008920.1, BC001294.1, BC003651.1, AK026504.1, AK024533.1, AK026480.1, BC002839.1, AL110196.1, BC003614.1, BC008836.1, BC006164.1, AL357195.1, AB056421.1, AB055328.1, AK025092.1, AL512746.1, AL390139.1, Z37987.1, BC002356.1, AB060888.1, AL137256.1, BC000054.1, AF352728.1, AL034400.2, AL136766.1, AF230496.1, AL137292.1, AL157433.1, BC006195.1, AL080118.1, AL512883.5, BC009285.1, BC008364.1, AK027095.1, AB060883.1, X65873.1, AL136784.1, AL133061.1, AF260566.1, AL080126.1, BC005872.1, AK026528.1, BC005021.1, AL137538.1, BC000090.1, AB060852.1, AK000618.1, AL137521.1, BC008417.1, S78214.1, AK026593.1,				
--	--	--	--	--

					<p>BC003410.1, X82434.1, AB050418.1, AB050510.1, AL137530.1, X69819.1, BC004951.1, AL050172.1, BC007926.1, AK025119.1, AL133624.1, AF218034.1, AF205861.1, AF125949.1, BC002476.1, AY033593.1, AL389982.1, X98834.1, X72889.1, BC001082.1, AL109672.1, AL137657.1, AL133054.1, Y14040.1, AK024594.1, BC002539.1, AF028823.2, BC001236.1, AB050534.1, AF177336.1, U58996.2, BC002535.1, L30117.1, AF217987.1, BC006159.1, AF183393.1, AL137554.1, AL117578.1, BC004324.1, BC003684.1, AL136763.1, AL442082.1, AF195092.1, AF155827.1, AF106934.1, AB052191.1, AB062978.1, AL049996.1, AL133084.1, AL049339.1, AB055361.1, AL137557.1, BC006251.1, AK025967.1, AK025391.1, AL122050.1, AF197929.1, BC009253.1, AL049460.1, AK026744.1, AF202636.1, AL355713.1, AL1242859.1, BC008075.1, AB055367.1, AK026630.1, AL122098.1, BC004310.1, AL122100.1, AK026927.1, AB060914.1, AL110225.1, AL353956.1, U80742.1, BC001969.1.</p>
HHFBY53	242	821330	1 - 856	15 - 870	<p>AA346699, BE897269, BG109478, BG178294, AI370129, AW238611, BF343729, AI000070, AI085870, BG179993, AI436456, BG108324, AV755207, AL514935, BE047863, AI802542, AI349772, AI500077, AL513643, AL121270, AI524684, BG165209, AL036396, AI225230, BF725126, BG260037, AI250293, BF883916, AL047042, BF343172, AW303152, AV655645, AL119049, AL036802, AL513907, BE048081, AL514627, AV681857, AW827203, AI064830, BG036846, AL046849, AI702406, AI475371, BF037097, BE048071, BE969709, BF727212, AV757737, BG111647, AL135661, AI521012, AI675423, AI433157, AL515041, BF971016, BF054877, BG168696, AW268253, AL121365, AL513597, AW075351, BE964812, AV682479, AL119791, AV681716, AL036146, AV756770, AV710479, AV757943, AI349645, AV711924, AW827249, AL119748, AV682224, AA187180, AI216146, AV681647, BG151247, BG031815, AV682266, BF969494, AV704928, AW238730, AV762488, AV682330, AL513911, BE968552, AL513837, BE887488, AI568870, BE613622, AV717179, AW274192, AI340582, AI687728, BG058208, AV721967, BF724691, AL514919, AV682351, AL513693, AI815383, AW071349, AW301409, AI349933, AI868831, AV682249, AI538716, BE966388, BG259801, AI349004, AI433976, AL045500, BG109125, BF795712, BF968493, AI687376, AV733470, AW071417, AW089572, BE880190, BG257535, AI799199, BF812933, BE964700, BG180996, AI969567, AI440426, BG114104, AL047763, AW074993, AI567351, BE048179, AV755290, AI281779, AV759235, AV757158, AL513553, AW195957, AI686926, AI678302, AI312152, BG252929, BG110797, BF695032, AV682074, AV681548, AV733397, BE877769, AA494113, AI687415, AI349937, BE785905, BF726421, AI497733, AW827211, BE965556, AV681685, AA610426, AW103371, BE048026, AI631107, AV757012, AV734318, AW169653, BE777769, AI345735, AV682441, AV758110, BG250190, BE876033, BG178809, AI699857, AL513753, AI635461, BF792099, BE048163, AI439087, AW162071, BE018711, AV755581, AL120854, BF793644, AV757018, AV723953, AI590128, AL513803, AV757853, AI275175, AV705644, AV758592, BE048319, BE047952, BG029399, BF970162, BE881155, AL514791, AV681630, AV758217, AW068845, AI863014, AI564719, AV682252, BG109270, BG108147, AL036274, AV757797, BE963035, AI934036, AI620284,</p>

					X72889.1, AC002467.1, AB052200.1, AL137463.1, Z82022.1, AF183393.1, AL583828.4, AK024524.1, AK027213.1, AL353625.5, AL133113.1, BC008382.1, AL157482.1, AC022215.4, AC010305.3, AL359583.1, AL137648.1, AF334404.1, AB056421.1, AC009364. 8.
HHFEC49	243	905849	1 - 2249	15 - 2263	W72062, AI827219, AI631461, W76255, AW449295, BF848562, BF849620, AI354957, AI222040, AI913803, T62772, T62921, T63781, AA364800, AF088057. 1.
HHFFJ48	244	634521	1 - 2552	15 - 2566	BF872051, BF760479, AA486028, AI536141, N91095, AW301931, BF772459, AW852705, AW852684, AW852657, BE138714, AB058744.1, AL589723.7, AC006512.12, AL451107.6, U47924.1, AL590762. 1.
HHFGR93	245	865581	1 - 1821	15 - 1835	AL513572, AL537139, BE869616, AL513571, AW190823, BE868295, BF528807, AW959200, BF998261, BF986378, W52782, BG009530, AA707399, AI921717, BE161072, AI656071, AI809901, AI870870, AA780017, AA046658, AA913618, AI633244, BF995431, AA428298, AI014541, AW300019, AW173046, AA428713, H12307, BF432551, H12782, BF115565, AI141481, AI092488, BE550395, W58612, AW172540, AI184646, BF222972, W58613, AI359381, AW361707, BE043092, AI970137, AI126255, R77354, AI624748, AI949837, AW081182, AI923177, AI187105, BE707255, R69232, AA514466, BF995428, AI521359, R69114, BG011026, AI347221, R76149, R73827, AA664044, R79810, H12841, AW594241, R78260, BG015155, BG002356, BF851373, H12629, R76098, R32862, R63063, R78261, T47327, AI189377, R73853, R62315, R68433, AI828342, R79923, H12360, AA618505, H12680, T50332, R79910, AW903922, AA733001, R35438, AI216465, AW903849, T98690, R73852, R81664, H00855, AA683601, AW009057, AI873711, AW513081, R33685, H02334, AI189455, AW365832, H02440, R67936, H02804, AI569353, R66838, R68432, H38189, R76065, R64387, R75889, R33581, R35749, AW235425, BG055882, R27675, T98640, AA991630, BF196820, AI189443, BF848636, R81467, BG007447, AA367816, R27576, R63218, R31360, AA359117, R31889, R34252, AI762218, AW002259, BF848635, W52486, H01235, AI199859, R62314, AA046788, AA249358, R64386, AW407088, N55686, R67441, AA446485, D45691, AI002022, AA430177, AF361746.1, AB060855.1, AF277292. 1.
HHFHJ59	246	411332	1 - 647	15 - 661	AA833770, AW877426, AA804902.
HHFHR32	247	411470	1 - 1364	15 - 1378	AL537554, AI949994, AI417813, BE176604, AL537293, W63587, AA555104, AV735759, BF433756, AW473655, W55970, AW779675, BE245761, AI436026, AI697597, BF446687, BE222143, AA310582, BE244564, AA725099, AA451851, AA860527, W49508, AI096339, BE218117, AA232777, AI082094, AL538385, AI160565, AA805441, W49509, AV741987, AI095778, AL538384, AA465271, AI685283, BE328263, AA233859, N62880, BF477950, BF240776, AV740618, W67453, W26654, R66448, AA347415, BE879790, AI301421, AA910440, AA815180, AA947419, AW388859, BE176537, AA806906, BF796176, AV716929, H04548, AA743984, AW294389, AW978207, D80074, AA953439, H53694, BF935876, D82288, BF971117, N26986, AA057527, R14689, BF794295, BF213700, W55969, BE893895, BF931384, AV743289, AW612155, H04469, N77787, R42413, N40108, BF243047, AA988864, BF240864, BE836282, BF239091, BE243458, N79387, D80452, AA910721, AV654871, BE887608, AV753942, M85866, BF243539, AI016440, AV754341, AV753874, AA013030, R13766,

					AA380256, BE244756, H59375, H59471, H59945, AW952223, AL080076.1, AL121977.11, AY026275.1, AY026274.1, AY026272.1, AY026271.1, AY026267.1, AY026266.1, AY026265.1, AY026264.1, AY026270.1, AY026262.1, AY026268. 1.
HHFOJ29	248	112749 1	1 - 1352	15 - 1366	AA776789, AI190772, AA428791, AI025500, AI219913, AW082984, BE241726, AI219933, AA628326, AW204939, AI698565, AI809744, R28215, AA913953, BE242686, AA477200, AW505434, TI2580, AL157938.22, AK024434. 1.
HHGBO91	249	520198	1 - 701	15 - 715	AA363260, AW063936, AI343123, AI648433, BE386324, BE409452, BF793428, AV738722, AV740060, AI284640, BE139358, AI612152, AL046409, AI254798, AV756074, AV712125, AV756848, AI061313, AW965518, AI284881, AI284888, AV757334, AI890348, AV760395, AI612032, AW303196, AI963720, AW301350, AV725431, AI306232, AW021774, AW021917, BE252421, AU152795, AV710482, AW274191, BE744242, AW274349, AW962942, BG249643, AI251576, AI583466, BF678427, BF980463, BF243118, AW504022, AW501806, AL048255, AV682003, AI254540, AI224184, AA747889, AW504104, AI349748, AI275328, AI251250, AW504480, AF074677, AI311505, AI064864, AA744001, AI610603, AI801205, AA572992, BF337291, H98660, BF673630, AW238583, AI053786, AA496901, BF917533, AL138455, AI590522, BF325535, AW499745, AW961593, AP002347.3, AC011475.6, AC004150.8, AC005231.2, AC005368.1, AL139100.9, AL096840.25, AF196969.1, AC007314.3, AC008760.6, AL132780.5, AL034372.33, AC016587.7, AL133163.2, AL133517.11, Z83826.12, AC005280.3, AL163032.3, AC019205.4, AP001716.1, AF111168.2, AC090939.1, AL096701.14, AC004965.2, AC005520.2, AP001726.1, AC004983.2, AJ400877.1, AL022476.2, AC006480.3, AC011464.5, AL096791.12, AL022326.1, AC006285.11, AC004638.1, AC007367.5, AL121655.1, AC018711.4, AC007256.5, AL139316.5, AC021999.4, AC005052.2, AC073657.5, AL121655.1, AC018711.4, AC007256.5, AL445483.13, AL137792.11, AL035683.9, AC004815.2, AL138849.12, AC011446.6, AL035587.5, AC003982.1, AL049761.11, AC004166.12, U95090.1, AC010530.7, AC000052.16, AC010319.7, AL139376.17, AC020754.4, AL356214.20, AC084865.2, AF254822.1, AC016772.8, AC083866.2, AC008946.6, AC004755.2, AC007386.3, U91321.1, AL049776.3, AC005089.2, AC011742.3, AC018808.4, AL033529.25, AC009086.5, AC002425.1, AC005736.1, AC005291.1, AC020928.6, AP001727.1, AC044797.5, AL360169.17, AC006530.4, AL355385.15, AC003070.1, AL031727.42, AL109797.18, AC007374.6, AC005295.1, AC006345.4, AL035458.35, AC006483.3, AC007114.7, AL450226.1, AC040160.4, AC008806.4, AC009501.3, AC007172.6, AC004148.1, AC008521.5, AL022336.1, AC008440.8, AC006001.2, AL135978.4, AL109743.4, AC008622.5, AC004033.3, AC024561.4, AC004475.1, AL139415.10, AP001728.1, AC020915.6, AC011465.4, AL139113.21, AC022007.3, AL080242.11, AL121652.2, AL049539.21, AC009060.7, AC008738.6, AL050335.32, AC027319.5, AL355392.7, AC007766.1, AC011484.4, AC021016.4, AL049569.13, AC012476.8, AC010311.8, AL035405.10, AL031005.1, AC004019.20, AC002565.1, AL031597.7, AC005971.5, AC079602.15, AC006064.9, AC005288.1, AC005015.2, AC002470.17, AL451125.7, AL008721.1, AC005077.5, AC006330.5, AC010326.6, AC034193.4, AC006329.5, AC008482.5, AC073138.3,

					AL162426.20, AC015982.9, AL353748.13, AC002310.1, AC016831.1, AC005844.7, AC007878.2, AL050349.27, AC006441.13, AC021188.6, AC004417.1, AC008280.4, AL137852.15, AC022392.4, AC007421.12, AP002812.3, AC069223.15, AC007686.5, AP001331.1, AC018758.2, AF107885.2, AC004971.3, AL132640.4, AC018828.3, AC074013.5, AL049780.4, AC007308.13, AP003357.2, AC010677.4, AC002316.1, AL031230.1, AL109628.5, AL008627.1, AC009570.13, AL512378.7, AC007255.4, AC006211.1, AC008892.5, AL136228.8, AC007404.4, AC011442.5, AC011811.42, AL121891.22, AL136179.15, AL136126.34, AL121601.13, AC006251.3, AL365338.17, AC002553.1, AC012306.11, AL133453.3, AL138787.11, Z98742.5, AC007216.2, AL033527.26, AC004596.1, U80017.1, AC005081.3, AC005098.2, AP000696.1, AL512347.14, AC002039.1, AC011895.4, AL139785.5, Z85987.13, AC005088.2, AL136172.16, AF001549.1, AC011449.6, AC002314.1, AC003029.2, AL024498.12, AF196779.1, AL034380.26, AP000557.2, AC007739.2, AC008891.7, AC022383.3, AC006038.2, AL121992.24, AP003439.2, AC004955.2, AC011455.6, AF243527.1, AL031447.4, AC018663.3, AC025594.5, AC007383.4, AL157938.22, Z98949.1, AC006084.1, Z93015.9, AP001725.1, AL109897. 30.
HHGCM76	250	662329	1 - 697	15 - 711	AW248957, BF828801, BF828604, AI675194, AW028119, BF826770, BF827069, AW452880, AI491913, AI799880, AW450970, AI377883, AI201976, AA595164, AI088096, AW612440, BE792795, AW006952, BF063362, AI697133, AA643065, AA580017, AI819005, AI866931, AI560641, AA635584, BF446220, AI829011, AW952316, AL524066, AW243832, AI200458, AI634449, AI670745, AI269568, AA326815, AI873666, AL523219, AL520944, AI478177, L31980, AW245254, AW194690, AW771866, AI767850, AW079488, T87766, D45523, BE242113, AA055697, AI306732, AW275312, BE280419, AI908657, R48473, AA013188, AI908646, BG250796, BE796614, T72628, BC002980.1, AC003665. 1.
HHGCQ54	251	544615	1 - 861	15 - 875	AL528163, BG252074, BF529806, BF855582, AA234290, AW264333, AI122942, AW293770, AA458524, R41805, AW338445, AW264239, AI091253, AW316552, AA454605, AI459366, BE299516, BF856403, R42539, AI698643, AI082503, BF436761, AI673224, AI864282, BG222925, F11117, AW293131, AI446586, AW029153, AA568555, AI123718, AI352145, AA234190, BG251585, AI459970, R41441.
HHGDF16	252	579890	1 - 876	15 - 890	AI365221, AI701000, AW954119, AW264473, BF344449, AI680921, AI492007, AW014989, AI860823, AI539819, AI473662, AW628976, AW276150, C75362, AU152947, AA167428, AI559629, AI811077, AI039475, AI656542, AI284462, AW590370, AI431949, AI656530, AW148492, N67246, AI915180, AA907555, AA047467, AA478729, AI365222, AI242862, BE018520, AA834839, AA412178, BE302119, AI823337, BF671770, T61838, AW007865, AA905198, H08613, AI382420, AA776507, AA385375, T94765, T94766, AA047401, N53320, AW890140, BF949155, N83376, BE883645, AV701945, AV704429, AW890022, AW898540, AV702726, AV703584, AV703624, C01033, AV702464, AW890015, AW956618, AV655824, AV708871, AV729091, AV704729, AV656250, AV655597, AV701800, AV705652, AV703976, AV707059, AV705178, AV661490, AV727054, AV701616, AV709625, AW956781, AW964267, AV706912, AW890016, AV709236,

						AV701584, AV726913, AV704346, AV728464, AV707827, AV693230, AV687808, AV705939, AV708600, AV705045, AV704029, AV702601, AV655568, AV727449, AV701067, AV727266, AV705517, AV650430, AV704588, AV702830, AV702086, AV728521, AV725260, AW951773, AV726646, AV703833, AV705813, AV729463, AV705474, AV703653, AV726903, AV725970, AV707500, AV728256, AL133418.4, AK023144.1, AF214114.2, AF208045.1, AF227899. 1.
HHGDW43	253	554613	1 - 1036	15 - 1050		AUI22180, BE070260, BE070199, N47096, AA633840, N50530, N49396, W00508, AC079353.5, AL122002.16, AC004506.1, AK022355.1, AC004808.1, AC002112.1, AL355334.26, AL137003.12, AL157893.16, AC005084.1, AL136116.11, AC020613.33, AL160237.4, AL109954.15, AL589684.7, AC021699.5, AL022150.1, AL138773.4, Z83848.1, AL390035.10, AC008269.4, AC016770.10, AC007132.3, AL356213.10, AL132656.14, AL139332.8, AP000679.5, Z83820.1, AC016941.9, AL358975. 8.
HHPDX20	254	610321	1 - 1147	15 - 1161		
HHPGO40	255	129992 7	1 - 988	15 - 1002		BF936014, BF926087, BF849807, BG059559, AA663575, BE464797, AL137451. 1.
HHPTJ65	256	490904	1 - 501	15 - 515		AL533025, BE464963, BF110244, AW085558, BF110283, BE348401, AI343272, BG149420, BE327679, AA719308, AW298394, AA425555, BF939779, BE669809, AI356804, AA719641, AA928881, AI458306, AA928875, BE221905, AI304915, BF064266, W52908, BF433114, R43953, AA235409, Z38804, AA890287, AI928712, F02482, BE503857, AW470411, BF940932, N63308, AW023387, BG149175, BG150134, H87740.
HHSDX28	257	553494	1 - 1099	15 - 1113		AA548981, BF835253, BF835251, AA854044, AI784057, AL034420.16, AC006060.1, AC025470. 4.
HILCF66	258	636025	1 - 1654	15 - 1668		AW866442, N50805, AW769075, BF836507, AI206345, BF840986, AA708926, AA426062, AUI55280, AW866532, AW769542, AI652458, AA258053, AA532374, AW674310, AI079267, BG178864, AI918893, AI583381, AI129768, AUI60789, AW151099, AI375855, AI077465, AI434984, AI084577, AA353483, AI803071, AI978803, AA435860, AA625163, BF437117, AI093544, AI016100, AI951676, AI684966, AI479709, AA502596, AA075493, AI224122, AA531263, AI865571, AA424807, AI337861, AI275719, AI784447, AI393782, AA045896, AI798537, AW627862, AI362624, AW188737, AI587550, AI583574, BE242408, AI951273, AA135691, AW514022, AI262711, BF939682, AA135723, H06916, AA398860, AI583554, N93804, AI707963, BF843408, BF843416, AL522362, AA625925, BF738648, AI919121, T98717, BF059218, AL526660, T98661, AW022094, D19802, AA887448, T25800, BF950460, AL529899, AA654911, W44832, AA426475, BF773449, AL529900, AA495877, AK023371.1, BC000630.1, BC000904.2, D14663.1, AF215935. 1.
HJACG02	259	130778 9	1 - 561	15 - 575		AA311223, BF002026, N41594, N30820, BF982046, AI829327, BE047833, AI457369, AW071417, BF968205, AI340627, R36271, AL036980, BF061283, BG168549, AW022682, BG034550, AV682418, AL047042, BF343172, BG113299, AW020693, BF751308, AI452560, AI690748, AI349645, AW946806, AI340511, BF924882, AW074869, AW196299, AL038445, BE781369, AW302992, BG110684, BE887488, AL514193, AI310575, BG164558, AI340533, AI349957, AI433384, BF680133, AV715560, AI309401, AI345005, BG163618, AI343112, AV743962, AI826225, AI811785, AI494201,

				<p> AW054931, AW268302, AW301300, AI349598, BF672397, AW072719, AW075207, BF526020, AV741327, AI345735, BG036846, AI697243, BE536058, AW193134, AI889147, BF904189, BE910373, AI500077, AA225339, BE138712, AI307210, BG033723, AI589267, AI269862, BE885353, AI313320, BG058150, BE886728, AW827106, BF527014, AI313352, BG110517, AL039086, AW079336, AI251434, AI274728, BF868928, AI524780, AI589947, AV682724, AI439717, AI312146, AI312339, AI814087, AI345745, AL036925, AI345258, AI932638, AI470651, AL036857, AW050578, AI196105, AV682227, AI306705, AW269097, AI620639, AI611348, AW090393, AL042628, AW152469, AA833760, BG256090, AI866798, AW074993, AI567351, AI431424, AI349614, AI311604, AW105601, BE966990, AL044207, AW167918, AI611738, AW169604, AW268253, AI862144, AI567612, BE886827, BF793308, AI890806, AI349256, AL036664, AI554821, AI312152, AI955906, AI336495, BF970768, BF885000, AW075084, AL120854, BE895585, AI950664, BE897632, BE964078, BF872670, AW022699, AI349937, AL036923, AW089572, AI334884, AI307543, AW151138, AW071412, BF885081, AI307708, AI312325, AI500659, AI868204, AI340659, BF816037, AI280655, AI612885, BF092710, AW302965, BF339322, AI334930, AI309443, AV699211, AV734185, AI307520, AI445237, AV724373, AI590423, AV756798, AI345739, AI889168, AI440263, AW117743, AI312143, AW673635, AW806761, AI343037, AV708834, AI434256, AI312428, W33163, BG109270, BE966829, AI349955, AW075093, AI371228, BE548914, AW827206, AI348897, AA427700, AI306613, AI312357, AI335426, AI348777, AI308032, AI569583, AI687127, BG249582, AI783997, BG030364, BG104820, AW161579, AI627988, AI344785, BG113662, BE971716, BF970449, AL079963, AL036718, BE047852, BE785868, AI207454, AI382670, AW020095, AI874166, AL036901, BE047952, AI670009, BG180996, BF970990, BF526262, BG027280, AL036274, BF061286, AI497733, AL041150, AI288285, AI890507, BG026428, AW827115, AW268964, AI343091, AI318280, AI567582, BG165051, AI554245, BE963035, BE138658, BG260037, AI310582, BG032208, BF344691, BE885490, AF352730.1, AF205952.1, AF323081.1, AK024538.1, X53587.1, AL512765.1, AL050393.1, AK025254.1, AF090901.1, AK026542.1, AL136787.1, AK026597.1, BC006525.1, AF218031.1, BC001963.1, BC007326.1, AB055366.1, AK027213.1, AL389939.1, AK026528.1, AK026855.1, AL122110.1, BC008780.1, AF090943.1, AL133098.1, AL136799.1, BC008070.1, BC003687.1, AK024524.1, AF091084.1, AL049466.1, AK025967.1, AK026480.1, BC002839.1, BC006807.1, AL136789.1, AL157482.1, AL117394.1, AK025391.1, AL137560.1, AY034001.1, AK025349.1, AF125948.1, AL359615.1, AJ242859.1, AK025906.1, AL136915.1, AL110221.1, AL050092.1, AL512718.1, AB056427.1, AK027146.1, AB060825.1, AL133075.1, AK025484.1, AK000391.1, AF056191.1, AB051158.1, AK026583.1, AB060908.1, AL133557.1, AL117457.1, AL110225.1, AK026526.1, AL080159.1, AL137550.1, AK026629.1, AL133640.1, AB063046.1, AF217987.1, AK026452.1, U42766.1, AL133606.1, AK026534.1, AL133067.1, AK024588.1, AB047615.1, AB048954.1, AK027182.1, AL049464.1, AL133113.1, AL133560.1, AL137521.1, BC008983.1, AB060912.1, AF097996.1, AK026353.1, BC008899.1, BC001967.1, AK026959.1, AL137459.1, AB060839.1, BC003548.1, AF090900.1, </p>
--	--	--	--	--

					AL050116.1, AB052200.1, AL133016.1, AL359620.1, AB060214.1, AF057300.1, AF057299.1, X72889.1, AK000618.1, BC002643.1, BC008417.1, AK026164.1, AK026506.1, AK026741.1, AL359618.1, AL442082.1, BC007199.1, AK025465.1, U91329.1, L19437.2, AL049314.1, AB056421.1, BC004958.1, AK027164.1, AB056809.1, AL162062.1, AL050149.1, AL389982.1, AL137463.1, AL122123.1, AF230496.1, AL162002.1, AB048964.1, AL133080.1, AL390154.1, BC006164.1, AK000137.1, AK026762.1, AL117460.1, AK026630.1, AL512689.1, AL512719.1, AL050108.1, AK026593.1, AB063100.1, S61953.1, AL049300.1, AL049452.1, BC005151.1, AK000647.1, BC001045.1, AB063079.1, BC002733.1, AL136893.1, BC002342.1, AK025383.1, BC004556.1, BC009284.1, AL080086.1, BC005678.1, AF078844.1, AF026816.2, AL136928.1, AL512750.1, BC003627.1, Y16645.1, AB062942.1, AF051325.1, AL512754.1, BC006103.1, U58996.2, AB060863.1, AL136844.1, AK000212.1, AL080074.1, AL359601.1, AF262032.1, AK026600.1, AL136864.1, U80742.1, AL136845.1, AL122093.1, BC008893.1, AL136892.1, BC006201.1, AL117435.1, BC008365.1, AL110280.1, AF061943.1, AL136749.1, AK027868.1, AB019565.1, AF162270.1, BC008382.1, AL133104.1, AF003737.1, AF353396.1, AL137557.1, AK000445.1, BC008284.1, AK000432.1, AF218014.1, AL136786.1, AB050510.1, AK024601.1, AL117583.1, AL137648.1, AB060929.1, AK025491.1, AL117585.1, AL122098.1, AK025573.1, AF219137.1, AF090903.1, AF125949.1, AF260566.1, AL050146.1, AF111847.1, AL442072.1, AB062978.1, AJ006417.1, AL122121.1, AJ012755.1, AL136784.1, AF104032.1, BC008488.1, AL080060.1, AB055315.1, AL137478.1, AB047887.1, AF132676.1, AF061836.1, AF183393.1, AK027204.1, AL080127.1, AK026647.1, AK027116.1, AL096744.1, AB055361.1, AL353940.1, BC008387.1, AL137556.1, X82434.1, AF090934.1, AL122049.1, AL162008.1, AB063070.1, AL122050.1, AL162003.1, AL137271.1, BC005168.1, AB048974.1, AK025798.1, AB055368.1, S78214.1, AK000486.1. 1.
HJACG30	260	895505	1 - 1518	15 - 1532	AA311188, BF940968, AI478697, AA309875, AA481249, AL533052, AA481563, AW242463, AA760629, AV651897, AV660258, AV661286, AV709580, AV653353, AV726590, AV703632, AV725255, AW960067, AV705453, AV726243, AV652001, AV704144, AV726194, AW956292, AW949777, AV708520, AV727618, AW959858, AV656283, AW967329, AV727932, AV728953, AV725582, AV708786, AV708872, AV661369, AW952013, AV705340, AV704234, AW965148, AV726156, AV705836, AV708991, AV725618, AW952301, AW958796, AV725596, AV709248, AW959986, AV726337, AV709407, AV728355, AV725031, AV707948, AV725441, AV729424, AV652528, AV725577, AV707556, AV704626, AV702071, AV706223, AV705665, AV704785, AV728404, AV709733, AV729366, AV708320, AV705343, AV727822, AV707264, AV704611, AV729473, AV702738, AV725321, AV690930, AV728743, AV727978, AV727337, AV727562, AV729129, AV704712, AV701953, AV727052, AW955629, AV729532, AV704520, AV706964, AV704973, AV702817, AV705504, AV709356, AV704279, AV705829, AV702164, AV701880, AV701626, AV707401, AV704756, AW955019, AV701183, AV728289, AV708203, AV703591, AV697880, AV647941, AV703417, AV753624, AW963446, AV654035, AV709935, AV726628, AV707654, AV706290, AV655552, AV654282, AW949521, AV709880, AV709939, AV705189,

					<p>AV704686, AV706882, AV727314, AV702954, AV727238, AV691615, AW967328, AV682997, AV727126, AV727347, AV728652, AV702787, AV706162, AV709596, AV686417, AV701728, AV701873, AV656240, AV692972, AV694871, AV705239, AV727459, AV655901, AV728715, AV701499, AV703972, AV703090, AV707794, AV702790, AV728546, AV705267, AV703762, AV703273, AV706734, AV702854, AV709025, AV706025, AV705684, AV656224, AV705299, AV709273, AV706165, AV727343, AV709932, AV702625, AV727468, AV707088, AV709549, AV645545, AV702498, AV701874, AV706671, AV705433, AV705866, AV728255, AV709256, AV706076, AV726559, AV651075, AV702537, AV706279, AV703436, AV727103, AV704097, AV726653, AV706532, AV706133, AV701496, AV658784, AV727807, AV728459, AV729077, AV707804, AV704592, AV704974, AV701858, AV703456, AV703515, AV702280, AV727032, AV705416, AV704116, AV702728, AV706910, AV727047, AV706889, AV705014, AV705047, AV703035, AV701538, AV727029, AV702869, AV725380, AV728455, AV706741, AV707830, AV707510, AV704971, AV706683, AV725956, AV707769, AV705234, AV706891, AV706527, AV728471, AV706758, AV690921, AV707798, AV725991, AV702725, AV724987, AV706448, AV725845, AV685113, AV726789, AV725387, AV726830, AV726787, AV702417, AV701844, AV702851, AV727189, AV706655, AV725386, AV655067, AW962136, AV706992, AV707420, AV706183, AV703366, AB000616.1, U94592.1, AJ244005.1, AJ244004.1, AJ26256.1, AJ276254.1, Z30183.1, D78345.1, DS0010.1, D13316.1, AB025273.1, AF144029.1, AJ276256.1, AJ276254.1, Z30183.1, AF144028.1, X82834.1, Y14219.1, U45328.1, AB005666.1, S81957. 1.</p>
HJBCU04	261	877643	1 - 1178	15 - 1192	<p>BE559708, BE560064, BE561205, BE396781, BF975879, BE559864, BE267986, AW964091, AW084454, BF796667, AI339413, BG106279, BF663626, AW964099, AA714519, BE267607, BE396583, BE267550, AA568144, AA312661, AW135205, AA767738, AA311112, AA252797, AA310964, AA977844, AA835549, AI832051, AA357111, AW971671, AA356801, AA746595, AI368885, AA380418, AA827647, AW407267, AW404968, AI010059. 1.</p>
HJBCY35	262	719729	1 - 1545	15 - 1559	<p>AL518865, AL526445, AL518864, BF690211, BE795952, BG261247, BG122941, BE871131, BF342499, BF797882, BG034854, BE874386, BF684303, AW958340, BF055513, BE265238, BF055496, AL042954, AL044311, AW393087, BF590235, BE251517, BF688851, AW500006, BF750912, BF436031, BE207255, AI523943, AI809559, AW615714, AI088845, AI199469, AI088821, BE792741, AA707004, AI393362, AI859578, AA864359, AI359119, AI963339, AA259086, AW027379, AA186786, AA703021, AA305929, AA393356, BE729570, AI961726, AW274049, AI216448, AW503180, AW505339, AI015694, AA291342, AI049539, AW873566, AI092749, BE410341, AI817912, AI870620, H44330, AI366215, AA258242, R46300, R16949, AI744596, R54656, BE386449, BE410337, AI807057, AW081887, AL041401, H15972, BE710574, BE410414, BE535502, BE222788, AA398688, AW273864, AA404987, D59795, AA077661, BE047327, T10451, AI871075, D59810, AI368575, BF526818, AA962247, AA335735, AW000813, BF435172, AA188015, R75708, AA329264, BE713106, AI218840, AA329538, AA291343, AA826970, T35806, R10855, D59833, D59821, BE547124, D80231, AI080034, AA299767, BF203222, AI908002, AA973311, AW087244,</p>

					BF920764, AI648592, D80329, BE537114, BF5111965, D59677, W93021, AI919083, AA749327, R16895, R55419, AA354448, AI136776, R54853, D59561, AI969256, W51754, AW273865, R10856, AI452772, BF765954, R10335, BF858687, AA076725, BF955782, BF206768, BF310354, BF032473, C01203, BC004286.1, AL050110.1, AB037861.1, AL137358. 1.
HJMBI18	263	545492	1 - 1007	15 - 1021	AI928477, AA527494, AI871626, AI694451, AI613494, N21002, AI630897, AI609811, AA987612, AI373242, AA595033, AW271584, AI858763, BF111620, AW975076, AA281453, C06206, H85386, C05666, AL536332, T23579, R22308, AI125182, AA488619, AI914281, R45226, R37773, Z40129, AA658001, N66912, N78467, BE778573, AA211234, AL119049, AA928812, AC007622. 28.
HJMBM38	264	545752	1 - 1010	15 - 1024	AL518937, AL518938, BE410807, BE298018, BF663486, BF664523, BE741022, AI471526, AI624274, AW006720, AW072426, AA548389, AI805053, AA649964, BE295825, AW013989, AI889549, AL525865, AI380679, AI142829, BE796333, AI968598, AW006482, AI937663, BF475729, BE645645, BE958622, BF872663, BC002598.1, BC005015.1, AK022244. 1.
HJMBT65	265	596795	1 - 607	15 - 621	AW952560, BG168943, BE467261, BE177934, AW069580, AI890128, AW273443, AI744746, AI379922, AI522079, AI032260, AI279840, AA281064, AI879924, T66144, HI1614, AW194179, AI085109, R55392, AA335275, BE178118, N99235, AA257070, F09767, AA257163, AW972958, BF769935, AW293807, C02264, AA988919, AA357316, AI699614, BE936621, R47297, BF037710, AW881403.
HJMBW30	266	491209	1 - 870	15 - 884	BF689071, BE747537, AI922821, AW170567, BE906428, AA494514, BE879640, AI815043, BE673226, AI420757, AI751544, AI587576, BE223099, H28718, AA939115, W57617, AI143025, AA291927, AA291926, AW183956, AI587557, F26397, F29408, AI127566, AI565236, AA661632, BF765308, BF338229, BG034851, AW883883, BE774322, BF808197, AA211229, AC013356. 8.
HJPAD75	267	651337	1 - 1217	15 - 1231	AL530365, AL524811, BG035149, AL524846, AV653215, AL525028, BF031163, BE464161, BF064198, BG057645, BE677690, AV714679, AI954819, AA708718, AA773040, AW206827, BE677490, AW590005, AL522800, AI075390, BG179367, AI933314, AA022693, AA563665, AI582700, BF591973, AI933036, AA011394, BE463890, AI304827, AW467513, AI675049, N47573, BE537595, AI075392, AI346305, AL514603, W26975, H02832, AI290715, AA535130, AW137781, AW298065, BF927479, AA917670, AA011431, AL530366, AA974770, AA535120, AI497684, AI277012, AI274193, AL514604, AW297638, AW779938, AA356778, AW067366, AL524812, AL524847, BF763877, AV652546, H03723, F09604, F09318, H83110, AA216050, AW573003, BF926201, AI572540, AL525029, BF092250, D80466, AI940747, AK027129.1, BC008984.1, AF043945.2, AL163284. 2.
HJPCP42	268	104029 7	1 - 1209	15 - 1223	AA780037, AI022797, AI023991, T86767, AL046060, T86675, AW867242, BF154952, AW966053, AW966054, AV724520, AW975618, AW949656, AW978634, D80038, AV719783, AV718800, AV719188, AV720464, AW966013, AW966534, D80195, AV975621, D51799, AW966531, D80193, AV718844, D80166, AV720211, AW966041, AV719822, AV718692, AW966062, D58283, AV719468, AW949654, D80227, AW959570, AV699927, AV723927, D81030, D59619, AW949658, AV719324, D80210, D80391, D80240, D51423, AV718770, AV699447, AW959597, D80253, AV718489,

					AV720203, AW973307, AW959628, AW960553, D80212, AV719557, AW949642, AV720731, AV722801, D80196, AV699550, D80269, AW966050, AV718440, AV720028, AW965177, D80219, D59859, D80188, AW949643, AW949646, AV723097, AW965158, D59927, AW966043, AW949641, D80043, D59889, AW949653, AW949657, D59275, AW959202, AW949631, AV720812, AW949629, AW949645, AW949632, AW978661, AW949618, AW949633, D80366, AV718633, D80022, D80045, AV720791, AV721386, AV720654, AW973447, D59502, AW960465, C14429, AW949655, AV700889, D80378, AW959582, D50979, AW964488, AW973485, D57483, AW966022, T03269, AW975605, AV699669, D80164, C75259, D59610, D80024, AV700229, D50995, AV718931, AW959799, AV718938, AW964737, C14014, AV742001, AV742667, AW978648, AV701125, AV701335, AV701166, AV701043, AV701332, AV701017, AV701248, AV701431, AV701419, AV742048, AW965163, AW965197, AW973541, D80241, D59787, AV681510, AV681491, C14389, AV699746, AV699682, AW965176, AW965185, AV719049, AV701154, AW959469, AV701130, AV719628, AV645389, AW973334, AV645344, AV701422, AV718707, C15076, AW964756, AV742430, AW956434, AW959062, AW964477, D81026, AW966029, AV701443, D80134, AV681468, AW958992, AW752082, AV645343, D59467, AW958993, AW959136, AV701149, F13647, AW966065, AV701415, C14331, AV745080, D51060, AV681529, AW962245, AW973474, AV719913, AW965184, AW973488, D80268, AW966560, AW956397, AV701428, AW965175, AV701344, AW962082, AA305409, AW973470, AW966075, AW973330, AV719727, AW178893, AW973482, AW960564, D80949, AV721784, AV718674, AV701004, AW973465, AW960504, AW975613, AW965196, D80168, AV720607, AW960473, D58253, AV701021, AV743601, AV720878, AV742720, AW964532, AW753053, C14227, AW966023, AW960454, AW975623, D59695, AV701224, AW960570, AV718530, AV744770, AW966059, D51079, AV645383, AV645393, AV741012, AV681528, AV681474, AV645339, AV681472, D79987.1, AF271371.1, X67155.2, D34614.1, D88547.1, AF058696.1, AB028859.1, AB002449.1, AB031111.1, D50010.1, U79457. 1.
HKAAE44	269	564406	1 - 1480	15 - 1494	AL520657, AL520658, AL522597, AV681522, BE548729, BE899593, BE790785, BE792835, BE732295, AA034095, BF207081, BG104235, BG248527, AA099014, BE797840, BF149380, BF529516, AA443460, AA521261, BF128722, BE262937, BF149417, BE560958, BG231704, AI380466, AV708717, AL522596, AI601258, BE279990, BF972266, AI922591, AI568423, AA521360, AI340192, AA576296, AI018766, AI292077, AI149390, BE222604, N26097, BF683179, N56989, AA156490, AI751520, AI362844, AI092927, AI885624, BE409895, AI554676, AA443342, AI144510, AI361418, N39813, AW073509, AI300469, AI302840, AA054959, AA134109, N26662, AA836018, BE546367, AI660772, AA045420, AI763377, BE559954, AA999788, AW262496, AI148818, AA576417, AA961788, AI918062, AA045314, AA156140, H23879, N36737, AA887768, W01353, AA420615, AA102403, AA099091, AA055421, R40598, AI686531, BF222554, AI421021, AA363039, H47023, H42173, AA811052, AA631072, H85513, AA130256, AI969959, AI093973, AA702964, N62818, AI826514, AA443329, AI632688, AA357703, AI470639, AI918816, AI472869, AA829362, AI868052, AA809432, AI186580, AA568573, AI241611, H23880, AI216887, H46484, BE265435,

					BE766321, AA778803, BF896430, N47374, AA356491, AA102402, BF054717, DI2235, DI2191, DI2183, DI2198, AI954721, AI500113, AV659451, AL043166, BG222794, AI798359, AI537677, AI648567, AI654286, AI560545, BG167830, AI927233, AI538615, BF812963, AI804505, AI815239, AI500659, BE883591, AI866465, AI474699, AI537643, AW983691, AI815232, AI866691, AI801325, AI500523, BF812438, AI538850, AA088789, BE885490, AI887775, AI582932, AI872423, AI590043, AI923989, AI284517, AI500706, AI445237, AI491776, AI289791, AI926593, BF811804, AW151138, AW983703, AI889189, AI521560, AW151974, AI285417, AI500662, AI623302, AI924051, AI539800, AI582912, AW172723, AI284509, AI538885, AI440263, AI889168, AI866573, AW058275, AI633493, AI434256, AI866469, AI434242, AI805769, AI888661, AI500714, AI284513, AI888118, AI285439, AI859991, AI436429, AI355779, AI623736, AI889147, AW194509, AI581033, AI371228, AI491710, AI431307, AI440252, AI440238, AL047422, AI567971, AI866786, AI860003, AI610557, AI431316, AI242736, AI784377, AI539260, AI828574, AI887499, AW151979, AI539781, AI431238, AI539707, AI702065, AI885949, AW089557, AI559957, AI285419, AI521571, AI872315, AI469775, AI932620, AI866581, AI696340, AL047398, AW074057, AI567953, AI815150, BC009283.1, BC009360.1, BC008417.1, AK000484.1, AL049423.1, AB060828.1, BC008840.1, AF132730.1, AC008897.7, AF249267.3, AF260566.1, BC004306.1, AL133607.1, AL137561.1, AF159141.1, AK026057.1, AL133084.1, AL133070.1, AL133655.1, AL136765.1, AL136763.1, AL136781.1, AL389982.1, AL049276.1, AB011076.1, AL050366.1, AL136615.1, BC002849.1, AL162066.1, AK026571.1, AK025015.1, AK027136.1, BC000386.1, AK026182.1, AK027222.1, AC023058.17, BC002942.1, BC008895.1, AF245044.1, AK026844.1, AC008964.6, AL080227.1, X83544.1, AK025377.1, BC008717.1, X66113.1, BC004533.1, AL136850.1, AF183393.1, U80919.1, BC009033.1, AL133053.1, BC002343.1, BC006494.1, AK025669.1, BC000538.1, BC007571.1, AK000250.1, AK025589.1, AL136825.1, AL133015.1, AL133608.1, AL133049.1, X99226.1, AB047819.1, BC005825.1, AB055361.1, AL136846.1, AL133051.1, AL161628.9, M64936.1, BC001115.1, AL136830.1, BC001328.1, BC003110.1, AJ010953.1, AB046105.1, BC003410.1, AL137463.1, AL080146.1, BC007522.1, AC026787.4, AL359618.1, BC004117.1, BC003024.1, BC006287.1, AL136845.1, AL031963.40, AC012067.2, AL356098.10, BC002516.1, BC004362.1.
HKAAH36	270	135233 2	1 - 1202	15 - 1216	BE899189, BE747860, BE898407, BE898385, BE745465, BE388198, W73168, BE742856, AI002163, AW820357, W73140, BF513278, BE393948, AA862032, BE742548, BE272355, BF035167, BE746400, AW380655, N80762, BF033594, AW105502, W68496, AA292366, W68361, BF514439, BF350313, BE075958, AA394040, H43923, BC008036.1, AF168768.1, AF243527.1, AF135028.1.
HKAAK02	271	589945	1 - 845	15 - 859	AA552324, AA367607, AW827115, AL042753, AW772536, AV733824, BG122481, AI610645, AL042382, BF339483, BF792469, BE965355, BE965758, BF970990, AI686552, BG120816, AL042544, AA640779, BF339333, BG110517, AW967257, AI567351, AW089572, AW169653, BF885675, BF828567, BF339322, AV758110, BG257535, AV698087, BE965432, AV760391, AI696626, AV751784, AI446373, AI872914, BE781369, AA613907, BG164558, AI801325, AL042538, AW074993, AI349614, AV652027, AI312152, BE544111, AI612759, BG112879, AI345735,

					<p> AW148320, AI349937, AW088903, AI679916, BF752252, AI537677, BE964636, BE963035, AI340519, AI922901, BF882334, AI064787, AL041772, BG112718, BE621256, BE620444, AI340603, BE964614, AI539771, AW827289, BF793324, BF344691, AI866002, BF960601, AI343059, BF726504, BF816455, BF343172, AI873704, AI349933, BF338002, AI919345, BE964812, AI364788, AW268253, AI251830, BE963918, AI366549, AI636719, BE964767, AI280661, BG031664, BE875407, AV755462, AI560012, AW403717, BE393551, AL119863, AW238730, BE047952, BG180996, AV760389, AW999049, BF814335, BF970449, BG058039, BE048087, AI680498, AI499920, AL514155, AA572758, AI539153, AI933589, AI468872, AI866608, AI343112, AL119457, AV720938, AW081255, AV746964, BE965192, AI349256, BE887488, BF971016, BE964700, BF884999, AW074869, AI348897, AI889133, AL121328, AV738991, BE613727, BE964876, BF915208, BF344652, BG036846, AI823670, BF816811, BF904180, AI687065, AL039086, BG032919, AW083804, AI307708, AL513741, AI500659, AA259207, AI800433, AI800453, AI343030, AI682743, BE048071, AI282903, AA494167, AI037454, AV762619, AI309401, AI540850, AW088134, AI648684, BF816042, AI433976, BE964263, BF909758, BF981774, BE963838, AW303152, AV710950, BG113299, AV682672, AV682763, AL045500, BE904051, AL036802, AI589993, AI805638, AI439762, AW161579, AI499463, BE894455, AI867042, AI591316, BF695032, BE895585, AL036396, AW103371, BG032208, BF343764, AV764282, AI349645, BE965481, BG249582, BE172412, AA528491, BG165051, AV682849, AL514919, AW935969, AI686926, BF344201, AI613017, AI570384, BF795712, AL079963, AI620284, BE047852, BE876033, AV711355, AL135661, AI537617, AV711242, BE172767, AL513983, AW131954, AI571110, AI433157, AL514069, BG254981, BG252929, AW806761, BE909398, AW068845, AA635382, BF055737, BE904178, AI312428, AI687376, BE885131, BF032768, AW023590, AI952114, BF679324, BG027047, BE877769, AV681872, AV759518, BE965621, BF904194, AI498579, BG178809, BE874133, BE966839, BF904189, BF900167, AI678302, BF812933, AI349644, BE904902, AL036214, AL036274, AC005952.1, AB049585.1, AB015630.1, AL354808.24, AB049758.1, AC005876.3, AK025772.1, AB063008.1, AK026551.1, AF348209.1, AK026045.1, AC026464.6, AF090934.1, AL035458.35, AL137283.1, AF177336.1, BC008387.1, AC007383.4, AB019565.1, BC003683.1, AL050108.1, AC007375.6, AB048964.1, AF218014.1, BC006807.1, AK000652.1, AL512718.1, AK024538.1, AK027096.1, AB055303.1, AB060887.1, AL390167.1, BC008488.1, AL080060.1, AL121656.2, AF225424.1, AB056768.1, AL389978.1, AL442082.1, AL359941.1, AL136928.1, AK027113.1, AB048953.1, AB047801.1, AK000212.1, AL162006.1, AL157431.1, AF207829.1, AK026865.1, AL122093.1, BC008365.1, AL512754.1, AF104032.1, AF078844.1, AL136892.1, AL136126.34, AK026480.1, AB063084.1, AL136984.20, AL353940.1, AK026542.1, AL162373.16, AL121601.13, S78214.1, BC003687.1, AK025491.1, AK026504.1, AL049938.1, AL049452.1, AB047615.1, AK000137.1, AC005291.1, AK025958.1, AB060908.1, AL512733.1, AB060916.1, AF090903.1, AK026452.1, AL133016.1, AL096744.1, AK026592.1, AL050146.1, AF146568.1, AL136586.1, BC007021.1, AL389982.1, AK026532.1, AL133093.1, AL110221.1, AL080137.1, AL137527.1, </p>
--	--	--	--	--	--

					AL050393.1, AB051158.1, AL136799.1, AF090943.1, BC002839.1, AL122050.1, AK026583.1, AL133640.1, AK025339.1, AJ242859.1, AK026784.1, AL136789.1, AB053361.1, AL353625.5, AK025092.1, AF219137.1, AL359618.1, AB060912.1, X82434.1, AB060826.1, AL110196.1, AB063046.1, AB056420.1, BC008417.1, AB056809.1, AL050116.1, AL512719.1, AB050534.1, AL122121.1, AB060863.1, AL136844.1, AL133557.1, AL136768.1, AL050149.1, AL110225.1, AL136845.1, AL050138.1, AL133565.1, AL133606.1, AK026534.1, AB063070.1, AL049382.1, AB055366.1, AC006435.7, AL117585.1, AL121585.22, AL133075.1, AC006115.1, AF111847.1, AB026533.1, BC008070.1, AL049466.1, AC008897.7, AL512746.1, AL137538.1, AB062938.1, AK026536.1, AF106862.1, BC006195.1, AL359596.1, AF125949.1, AK026608.1, AL136787.1, AL133560.1, AF091084.1, Y16645.1, AF097996.1, BC001967.1, AK026744.1, AK025414.1, AL137459.1, AF131216.1, AF090900.1, AF090901.1, AK027868.1, AF183393.1, AL133258.16, AK026855.1, AL117583.1, AL122098.1, AB060825.1, AL359601.1, AF125948.1, AL136749.1, AL122123.1, AL049464.1, AK000618.1, AB055315.1, AK000445.1, AL137550.1, AB047904.1, BC002733.1, U42766.1, AL080124.1, AP001666.1, BC007199.1, AL162083.1, AL137557.1, AL133080.1, AK000432.1, AL049314.1, AK026959.1, AK025084.1, AK026741.1, AB048954.1, AK000083.1, BC001045.1, AL117460.1, AB060852.1, AB055368.1, AL117457.1, AL359615.1, BC004556.1, AF090896.1, AL117394.1, AL050277.1, AL117435.1, AL356747.18, AC015982.9, AL049283.1, AL512684. 1.
HKABI84	272	565078	1 - 1224	15 - 1238	BE908972, BE871345, BE969781, AU127317, AW665494, AL650586, BF699086, BF432884, BF241722, BF087758, AI923936, AW271402, BF058229, BE349336, AA483696, BE504564, AV753084, AI553984, AA934906, AU148404, AU125401, AA521022, N53984, AI079322, AW015810, AA481668, AU120404, BE836738, AW959428, AA478921, AI341198, BF086194, AI559514, BF095983, AW439579, R78314, BF086179, BF992216, BF992222, BE930087, AA149227, AW627942, BF992221, AA831360, BE858967, AA300892, BF095985, AI909338, BE930086, AA331631, AL079584, AA971728, BF526589, T27345, AA515943, AW894981, BF086178, BG255010, AB007885.1, AC023426. 29.
HKABZ65	273	862030	1 - 1175	15 - 1189	AA715814, AA503019, AV762033, BE155099, AV734997, BF917346, AW338860, AC011666.28, AF242518.1, AF109907.1, AC004867.5, AC020917.4, AC004166.12, AL356915.19, AC005071.2, AC004878.2, AC005052.2, AC005081.3, AC002549.1, AL590763.1, AC020663.1, AC006064.9, AC008745.6, AC004858.2, AC022405.5, AC007666.12, AC008750.7, AL451144.5, AP001716.1, AC009131.6, AC004656.1, AL109825.23, AL355312.24, AL035086.12, AC010605.4, AC004067.1, AC004477.1, AC008736.6, AL109915.10, AC006023.2, AL033529.25, AC007637.9, AL139317.5, AL031311.1, AL049776.3, AC004971.3, AC009220.10, AL080243.21, AC005015.2, AC004686.1, AL022318.2, AC002310.1, AC009123.6, Z93015.9, AC021999.4, AL355353.23, AL050318.13, AL161756.6, AC011464.5, AL132712.4, AL359513.12, AC007546.5, AP001695.1, AL035683.9, AC018711.4, D87675.1, AL133444.4, AL139100.9, AF030453.1, AC006077.1, AC008895.7, AP001713.1, Z84487.2, AL357153.4, AL163636.6, AL359382.23, AC004770.1, AP001972.4,

					AC004675.1, AL355392.7, AC020906.6, AL138784.30, AC020754.4, AL162426.20, AC002288.1, AC009068.10, AC008101.15, AC008623.4, AC008891.7, Z98884.11, AL136137.15, AC011247.10, AL133163.2, AP001727.1, AC005098.2, AC004659.1, AC005670.1, AL139022.4, AC009812.17, AF088219.1, AL035404.20, AL139801.17, AF228703.1, AC002492.1, AC006084.1, AL353594.13, AC005077.5, AL160271.19, AP001724.1, AC008537.5, AC024561.4, AL139353.3, AC004491.1, AC008626.5, AL391987.15, AC010530.7, AP003352.2, AC009267.15, AL122013.5, AP000008.1, AC087071.2, AC009314.4, AC020913.6, AL078463.11, AL096700.14, AC002369.1, AC010102.3, AP003357.2, AL031123.14, Z95331.2, AL513008.14, AL118501.22, AP001435.2, AC005200.1, AJ400877.1, AC011469.6, AC016772.8, AC005089.2, AC005088.2, AF312912.1, AL022316.2, AL080317.11, AP001693.1, AP000553.1, AL390294.19, AC006345.4, AC091394.2, AL359813.23, AC007283.3, AL353807.18, AL109921.21, AC074121.16, Z98742.5, AC007383.4, AF243527.1, AC027130.5, AC010504.7, AL035462.21, AC010650.8, AC005180.2, AF334404.1, AL139187.19, AC005037.2, AL021391.2.
HKACB56	274	554616	1 - 482	15 - 496	AI935239, BE122852, U51140, BG121875, BF970449, BE879967, BE545287, AI311480, BF968910, AI207454, BG031442, BF815930, BF792050, BF339322, AI924051, R99209, AA669025, AA505147, AA806160, AK026797.1, BC000650.1, AB060839.1, AL133557.1, BC009192.1, AL136622.1, AB048888.1, AL512754.1, BC002485.1, BC004908.1, AF004162.1, AL358532.11, BC004181.1, BC006251.1, AK026603.1, AK000647.1, AK024974.1, S69510.1, BC008823.1.
HKACD58	275	135220 2	1 - 3139	15 - 3153	AL528271, BE513051, BE874633, BE727126, BG119953, AA877796, BE897630, BE616928, BE873485, BE409112, BF568632, BE886189, BE890308, BE259677, BE389188, BE386943, BG033053, AW957771, AW880570, BE389298, BE782739, BE042596, AI829975, AW027434, AI335269, AI525602, BF382771, AA495894, AW402301, N46240, BE735624, BF887879, BE258030, AI819188, BE349022, AW008354, BF509970, AI683541, H38504, AI365603, AA178917, AA180758, BE812358, BG250135, BE874703, AW390227, BG029976, BE812223, AA354527, AA178918, AI204915, AW194439, AW390207, BF875432, AA425001, AW368379, R88102, BE932912, BF511057, BE932910, BE301126, BF912732, AI360437, AA370005, BE764970, R69656, R53778, BE830394, AA134615, BE697358, R54897, F37313, AL536107, AI280553, F34525, BE171591, AI524965, AW880505, F27458, AI193372, R55008, AW339374, AW999021, BF885645, AA227281, BF799341, BE410974, R55146, AI651533, AA355898, AA149032, H21738, BE937883, R78049, T74386, T27237, R69572, H22354, AW946340, AW169264, AI630501, AI699781, BG001443, AA343322, BF932030, AI971329, BF813656, AI096656, AI367032, AA380842, AL138431, H22385, BF929569, T50676, BE393507, D29121, AA668973, BF934053, BE206656, AI620083, AI493047, AI872461, H29733, BF793181, BC006159.1, X80590.1, AI050037.1, AC006457.3, AC006455.2, BC000224.1, AF075046.1, AL117382.28, AC009242.5, AC002565.1, AC009314.4, AC011005.7, AC007934.7, AP000547.1, AL442096.1, AC083866.2, AC008551.5, AC020550.4, AC002365.1, AF001548.1, AC008073.4, AC005225.2, AL590762.1, AC010792.4, AL365332.9, AC004491.1, AC004686.1, AC004551.1, AP000744.4, Z84480.1, AC005484.2, AC006236.1, AC005622.1,

					<p>AL135749.3, AL158198.14, AL034548.25, Z82214.23, AC012597.24, AL161781.12, AC009137.6, AC018636.4, AC011362.2, AC005899.1, AC004965.2, AC006241.1, AC005098.2, AC002563.1, AC091394.2, AP000338.2, Z83844.5, AL096701.14, AC009228.4, AP000216.1, AC019171.4, AL445645.10, AC007371.16, AL365364.19, Z93015.9, AL391241.21, AC009120.8, AC091492.1, AL358434.16, AL049776.3, U82828.1, AC005520.2, AF196779.1, AL358777.12, AC010271.6, AC002352.1, AL133245.2, AP000337.1, AL139100.9, AC004253.1, AC004149.1, AL158167.15, AL034420.16, AC004386.1, AP001760.1, AF111168.2, AC018639.8, AL353812.13, AC004953.1, AC006487.8, AC010616.5, AC009812.17, AL445493.8, AC008670.4, AC004770.1, AL117692.5, AC004166.12, AC005821.1, AC004144.1, AL159168.15, AC005071.2, AC008764.7, AC008892.5, AC009247.12, AC004867.5, AC010605.4, AC005103.3, AF047825.1, AL121834.20, AC078846.2, AL117334.29, AL163973.1, AC074121.16, AC004824.3, AL138849.12, AC011497.6, AL391868.15, AC007021.3, AC008655.6, AP000500.1, AC006038.2, AL160175.5, AC010422.7, AL109920.15, AC011465.4, AL109976.23, Z85987.13, AC090939.1, AP00102.1, AL136418.4, AL139054.1, AD000092.1, AL031311.1, AL034549.19, AC010543.8, AC007336.5, AL033543.6, AL590763.1, AL136137.15, AL050349.27, AC005067.2, AC005412.6, AL139343.9, AL121895.26, AP000115.1, AC006101.3, AC010512.7, AC002418.1, AC018695.6, Z98941.1, AC020915.6, AC027319.5, AC004150.8, AC006345.4, AC009049.3, AC008403.6, AC005488.2, AC005207.1, AL121900.26, AC020904.6, AC008066.4, AC007374.6, AP001727.1, AL136228.8, AC025166.7, AC083871.2, AC008752.6, AC008569.6, AC005089.2, AC013429. 12.</p>
HKACH44	276	545015	1 - 672	15 - 686	<p>BF341755, BF791960, AA877614, AU153686, BF340330, AI199494, AW004725, AA628899, AI042456, N74995, AV753372, AI916084, BF437469, BF446199, BF509743, BG035423, AI563977, AI276433, AI953416, AI659007, AI351215, AW769176, BF448885, BE042362, AI401836, AI440396, BF337499, BF970652, AA504557, BG164558, BF816037, AL515323, AI633125, AI670009, AI433157, AI702073, BF812431, AI500061, AW834302, AI637584, BF812961, BF792047, AI815232, AI471909, AL513991, BG166654, BE966278, AI687362, BF856017, AI929108, AW090071, AI915291, AI887308, AI866770, AI698391, AW163834, AW198090, BF814450, AW087445, AI345587, AI889189, AL110306, AI863241, BF856052, BG107844, AL515413, AI283760, BG110577, AL039086, AL514025, AW148363, AW073865, AI612852, AI580435, AW190194, AI270183, AI582932, AI521560, AW131331, AI249946, BF970768, BF726421, AI826636, AA928539, AW935969, AL515089, BE965432, AI473471, AV682414, AL036780, AW268302, AI345415, AI890223, AI796743, AL513999, AI274759, AL514579, BF103225, AW827289, BF339322, AL514867, BG108288, AI678496, AI677796, AW130776, AL513817, AI653979, AW673679, AI288285, AI587114, AI932794, AL119836, BF724894, BE964614, BF904180, AI445992, AW301505, BF885082, AI912356, AL042745, AI340519, AI249877, AL513937, AW169671, AW192652, BF680133, AI434468, AW806761, AI699056, AA259207, BF813196, AV757827, BF791937, AI801325, AI564719, AW152182, BE965621, BF904194, AI242248, AA420722, AW118518, AI768496, BF868489, AI890214, BE965599, AI349772, AL513577, AI797908, BF348329, AI864836, BF814412,</p>

					<p> AW151136, AV760409, BF814761, AL037454, AI250819, AW081298, BE965121, N33175, BF344359, BE910373, AL514093, AL513713, AW192687, AL514701, AW189196, AI280637, BG110241, AI800440, AI612913, AW104724, BE778192, BF032768, BE878014, AI089782, BF822127, BF792715, AI610690, AL514087, AI870192, AI499986, AW104827, AI445025, AI670002, AI610671, AI909641, BF812938, AV733410, AI434223, BF343447, AI491842, AW090550, AI500523, BE877142, BE964636, BF813177, AI627988, BF812960, AI567128, AI119457, AL513901, AW051088, AI500662, BF970731, AL514819, AW075667, AW583182, AW148408, AL514493, AI499393, AW983691, BG110517, BF982265, AW105383, AI888661, AI469112, BE047691, AW149069, AW193530, AW073270, BG114901, AI923370, AI469532, AI571439, BE966550, AI866801, AV702117, AL514047, AI561231, AW087207, AV681891, W74529, AW026882, BG031815, AI866573, AW983703, AA572758, AI250646, BE905087, AI921464, AI570807, AW117746, AI620284, AI699865, BF037097, AI434432, BG179993, AI611743, AW129722, AC004812.1, AK001309.1, AK024588.1, AK000083.1, AK026462.1, AF090901.1, AK026597.1, AB056420.1, AK025092.1, BC004951.1, AL110196.1, AC007458.13, AL049382.1, AK027204.1, AF090900.1, AB056421.1, AL353940.1, S61953.1, AK026744.1, AB048954.1, AJ012755.1, AF230496.1, AK026542.1, BC003687.1, AL137550.1, M92439.1, BC002733.1, AC002471.5, AC005374.5, AK026583.1, AK025484.1, X72889.1, AL122121.1, AF090903.1, AK026528.1, AK024855.1, AK026855.1, AL117435.1, AL050277.1, AB048953.1, AK026534.1, AK025967.1, AL512684.1, AF177336.1, AB060863.1, Z82022.1, AL512733.1, AB055315.1, AL512689.1, AL512765.1, AL050393.1, AL137480.1, AF104032.1, AK024538.1, Y16645.1, AK027096.1, AL080159.1, AL136844.1, AL133075.1, AF146568.1, AF090896.1, S78214.1, BC008365.1, AL512750.1, BC000008.1, AL137283.1, AL049938.1, BC001967.1, AK000212.1, AB062938.1, AL050149.1, AF125948.1, AK025339.1, AL136892.1, BC004530.1, BC002485.1, AL359583.1, AK026784.1, AL359601.1, AB063100.1, BC001045.1, AK027868.1, X82434.1, AL137271.1, AF183393.1, AF113222.1, BC000100.1, AF262032.1, BC003684.1, AL137658.1, AF056191.1, AL389982.1, AL389935.1, AL133560.1, BC008070.1, AB060826.1, AL133080.1, AK025414.1, AK025541.1, AB056809.1, BC007680.1, AK026927.1, AF026816.2, AF091084.1, AK026504.1, BC005805.1, AK025632.1, AL110221.1, BC008417.1, AL136805.1, AL136749.1, AK026593.1, BC009033.1, AK026480.1, AL137560.1, AL133640.1, BC006103.1, AL137459.1, AB060916.1, AL512719.1, AB048975.1, AB063084.1, AL049452.1, AL137533.1, AL583915.1, U80742.1, AL050138.1, AF106862.1, U38847.1, BC005678.1, AB055361.1, AF131773.1, AL049283.1, AB063070.1, AK026353.1, AB055374.1, AL512718.1, AL117460.1, AK026630.1, AL133557.1, AB055368.1, AF090886.1, AL096744.1, AL442072.1, AL137488.1, AL110280.1, AY034001.1, X79204.1, AB060912.1, BC008387.1, AL357195.1, AF225424.1, BC004265.1, AF217987.1, BC007926.1, AL162006.1, AK027164.1, AL122098.1, Y14314.1, AL133016.1, AB052191.1, BC004556.1, X99971.1, BC006412.1, AL133565.1, AK026532.1, AK026408.1, AL122110.1, U92992.1, AL049300.1, AL137557.1, AL050024.1, AL049430.1, AK026642.1, BC005168.1, AK027173.1, AK026741.1, </p>
--	--	--	--	--	---

					AF218033.1, AB060852.1, AB055303.1, AB060887.1, AL050116.1, AK025524.1, BC003122.1, AL162083.1, AK000432.1, U39656.1, AF143723.1, AL353957.1, AB060908.1, AK025435.1, AL049466.1, AF260566.1, AK000323.1, AL359615.1, BC001670.1, AL035458.35, AF271350.1, AK024524.1, AL133067.1, BC008488.1, AB050510.1, AK026522.1, AL359596.1, AK026659.1, BC008723.1, AL117457.1, AK025312.1, X65873.1, BC006807.1, AB049892.1, AL359941.1, BC004362.1, AK000391.1, AL136774.1, BC008823.1, AK000718.1, AL080124.1, AK026865.1, AL162002.1, BC007326.1, BC000051.1, AF090934.1, AK026021.1, AB051158.1, BC006180.1, BC004958.1, AB049853.1, AL136789.1, BC003548.1, AL136765.1, AB052200.1, AL157482.1, BC008893.1, AY033593.1, AL133619.1, AL136787.1, AB047904.1, AL359618.1, AK000486.1, BC007198.1, BC007021.1, AL137463.1, AK026464.1, AF097996.1, AL162008.1, AK000137.1, AK025857. 1.
HKACM93	277	135238 3	1 - 2338	15 - 2352	AA223404, AA326415.
HKAEL80	278	570865	1 - 1091	15 - 1105	AW449289, BF108704, BE222750, AA431227, AI333314, AA825577, AW451583, AA432249, BF896306, T95377, T95297, AI349516, AA612984, AA629184, AI217747, AW007759, AI805363, BG249643, AV762098, AA829225, BF131300, AV760777, AI284640, AI040051, AV763354, AL120343, AI282336, AI564185, AW193265, AV710066, AV764578, BF130107, AI587583, AI587565, AW833862, AI064864, AA490183, AI801591, AA644090, AI350211, AV710482, AV734120, AI375710, AI017251, AV728425, BF681619, AV755677, AI061313, AL118991, AI613280, AI341548, AI471481, AW613805, BF530072, BE251460, AI754658, AI885572, AW973992, F36273, BG099291, AW975425, BF692524, AW975259, AV725423, BG178784, BF337291, BE386265, BF793664, BF925233, BE019467, AW236277, AW502975, AW302013, BF592311, AV764241, AV759507, AI687343, W79504, AC009137.6, AB038653.1, AL158035.14, AL133240.3, AC011497.6, AC016526.6, AP002360.4, AP002853.3, AL355336.15, AC004382.1, AL359091.10, Z98751.1, AC034198.6, AC012476.8, AL161911.17, AC010205.5, AL137073.13, AF031078.1, AF030876.1, AC007878.2, AC005254.1, AL139415.10, AC005409.1, AF168787.1, AC025166.7, AL136358.13, AL356862.10, AL391122.9, AL158141.14, AC018801.4, AC018633.2, AC024239.7, AL133344.28, AC017079.5, AC024028.10, AC027124.4, AL034379.8, AC008569.6, AL450169.1, AC016025.12, AC020558.4, AL160231.4, AF288742.1, AC005562.1, AC020904.6, AC008663.6, AF279660.2, AC067744.5, AL121905.23, AC083863.2, AC006998.3, AC002128.1, AC002287.1, AC004253.1, AC079045.2, AC066597.4, U96629.1, AC004967.3, Z97054.1, AL139123.14, AC006500.4, AL122004.17, AL157702.10, AC010202.6, AC005046.3, AC020917.4, AC068319.4, AC067742.5, AC003046.3, AC005004.3, AC002395.1, AC005220.1, AL034420.16, AC002299.1, AC019100.4, AC008892.5, AL359792.3, Z95125.1, AC011446.6, AP001715.1, AL022323.7, AC006254.10, AC006111.3, AP001432.1, AL049874.3, AC026391.6, AL132768.15, AC022148.5, AC005284.1, AC012499.7, AC005531.1, AC011452.6, AF064857.1, AC007011.1, AL078624.24, AC020571.8, AC005079.6, AC002456.1, AP000151.1, AL136525.17, AP001743.1, AP001728.1, AF067844.1,

					AC009412.6, AC008745.6, AC051619.7, AC000118.1, AC006126.1, AC012634.7, AC004069.1, AC079630.18, AC018841.3, AL132985.4, AC018495.4, AC066589.3, AC005837.1, AC005529.7, AL160271.19, AC090885.1, AL356010.9, AL009181.1, AL138849.12, AL158817.11, AC007248.3, AL008723.8, AC069246.5, AC009961.11, AC002091.1, AC011485.6, AL031577.1, Z83836.2, AL356299.16, AL132640.4, AL035425.13, AC007751.3, AC016397.5, AF003626.1, AL139321.28, AC011816.17, AP001710.1, AC004962.1, AC006480.3, AC016770.10, AL136313.27, AC004703.1, AC020552.4, AF053356.1, AC004912.1, AC006285.11, AC005822.1, AC003035.1, AC011005.7, AP000355.1, AC004508.1, AC006450.13, AL137139.9, AL031591.19, AC002041.1, AL359744.17, AL137100.4, AC005537.2, Z98304.1, AC007374.6, AL357560.11, AC005182.2, AC003982.1, AL355353.23, AC006449.19, AC044797.5, AL161422.14, AC002351.1, AC010319.7, AC008755.6, AP000354.1, AL353588.25, AC011740.7, AL162377.10, AL109963.4, AL121753.30, AL162742.9, AC007707.13, AL512347.14, AL449143.18, AC011248.8, AC002369.1, AC006441.13, AC002119.1, AC005034.1, AP001068.1, AL135927.14, AF111168.2, AL354928.9, AC005342.1, AL163285.2, AC083871.2, AC002365.1, AP000347.1, AC007882.3, AL139390.15, AL136000.4, AC007227.3, AL354873.19, AL050318.13, AC073617.16, AL031229.2, AL137071.22, AC010283.5, AC018511.4, AL132659.10, AL117259.6, AC007450.1, AC079602.15, AF131215.1, AL391002.9, AC010530.7, AP003534.1, AC002126.1, Z83819.1, AC012170.6, AL354720.14, AC006028.3, AL031257.1, AL160165.17, AC022267.8, AL137800.12, AP000033.1, AC003959.1, AC021036.5, AP001717.1, AP001694.1, AC008983.7, AP000350.1, AC007907.2, AL445483.13, AL109810.13, AC055120.5, AC000387.1, AL033378. 12.
HKAEV06	279	135226 3	1 - 2482	15 - 2496	AU133136, AV762150, AW967049, AI114751, BF678978, BF698605, BE536006, AA317243, BE748143, BG163940, BE789994, BF724673, BG231175, H06819, R19670, AA081581, BF129960, AA334334, H26678, BF332901, BE159061, BE159060, BE159062, BF818584, BF819690, BG115835, BF986034, BF819681, BE872393, BG236735, AL118991, AA515224, BF822777, AW872676, AW630298, AI291124, AW872575, AI801482, BE677379, AI801591, AI873916, AI017024, AW794809, AI291268, AI061296, BE883501, AW467340, AA482681, AI200051, AI245679, AW467362, AA525790, AV681599, AV760191, AI192631, AA620411, BE677026, AW473163, AW102849, BE042475, AV738303, AV715162, AA348017, R97934, AV761745, AV764609, AV761286, AK001708.1, AK000169.1, BC008120.1, AL035246.13, M13254.1, AC003681.1, AL022238.1, M87917.1, AC005779.1, AC011495.6, AC004918.1, AF045555.1, AC005757.1, AC022148.5, AC000085.5, Z70289.1, AC004926.2, AF085444.1, AC007570.23, AC007066.4, AP000513.1, AL139100.9, AC005089.2, AL133387.8, AC011442.5, AB023052.1, AC000052.16, AC005104.1, AC009225.3, U67828.1, AC005484.2, AF254822.1, AC004477.1, AL022721.1, AC004159.1, Z99128.1, AL356481.16, AC007021.3, AC006530.4, AC010642.5, AL355497.14, AC005940.3, AL049757.14, AP000744.4, AC010506.6, AL034451.26, AL139317.5, AC018828.3, AL080317.11, AC011500.7, AC022383.3, U63721.1, AC011464.5, AC007536.9, AL359457.12, AC004854.2, AC009412.6, AC011497.6, AC005057.2, BC004147.1, AL035681.13, AL356499.16,

					AL450226.1, AL022329.9, AL133332.12, U95740.1, AC002369.1, AC020750.3, AL122004.17, AC006452.4, AL021391.2, AC006312.8, AL158159.14, U78045.1, AC002984.1, AC083855.2, AC004662.1, M19045.1, J03801.1, AP000842.4, AC018758.2, AP000553.1, AL451125.7, AC004973.1, AC018751.30, AL133245.2, AC008486.6, AL391827.18, AC073316.6, AC006468.9, AL049759.10, AC004000.1, AC018809.4, L78810.1, AL355385.15, AC010358.5, Z98949.1, AC005204.1, AC027644.9, AL133376.6, AC004019.20, AL122023.3, AC005056.2, AJ003147.1, AC007011.1, AC005368.1, AL132838.4, L81693.1, Z68756.1, AP003357.2, AL122003.17, AF207550.1, AF012654.1, AC026882.5, AC006511.5, AP000115.1, AL117333.26, AC083868.2, AC005184.1, AC005264.1, AC024166.3, AC016601.6, U95090.1, AL163279.2, AP000306.1, AL138759.20, AC068533.7, AC016697.8, AC002460.1, AP000349.1, AL137077.31, AC008536.6, AL031281.6, AL022322.1, AL031668.23, AC025165.27, AC066580.3, AP001680.1, AC034193.4, AC016831.1, AC079363.19, AL590762.1, AL121777.39, AC008443.8, AC006277.1, AL136170.12, AC005261.1, AC020931.5, AC004814.2, AC005695.1, AC010150.3, AC026475.6, AC008610.6, AC002288.1, AC004867.5, AF165926.2, AC007163.3, AC025679.4, AC009086.5, Z83844.5, AC007546.5, AC004476.1, AL096840.25, AF373586.1, AE006639.1, AC019097.5, AC010645.5, AC091529.1, AC068660.3, AL034420.16, AC009499.4, AC022384.4, AL157938.22, AC004821.3, AF196779.1, AL159168.15, AC008403.6, AL445201.14, AL162491.10, AL450343.4, AC004224.1, AL031255.1, AC009007.4, AC004966.2.
HKAFK41	280	545018	1 - 535	15 - 549	AW731712, AL1984229, AW467342, AW304765, BE877315, AW083191, AI751170, BF968461, AA130811, AI698682, BG104768, BE504315, AL515743, AA628399, AL515742, BE890543, N50073, AA171899, N49092, BE897480, AV739544, AI698019, BE875495, AW612114, BE872122, BG105488, AL514280, BF839730, BF961737, BE172618, AA826581, AI743618, BF351788, BE502704, BF909218, AA249816, AA723906, BF541035, BE674507, AA625850, AV661774, AV661759, BC000194.1, AK027421.1, AJ271091.1, AL137412.1.
HKAFK66	281	946512	1 - 987	15 - 1001	AA436785, AI804932, AA310516, AW966935, AA873013, AA251417, AI798761, AA250867, BE720668, AW827206, BG122481, AI826225, AI811785, AI539808, BF970449, AL039086, AW983783, AI554821, AI784252, AW105601, AV708119, AW054931, AV727839, BF968205, AL119863, AI280747, AI611738, BE047737, BF970768, AW193134, AW118518, BF904265, BF089711, AI610362, AL042628, BF793370, AL036980, AI312428, AA833760, AL513763, AI829327, AI433384, AI589267, AI269862, AI564723, BG031539, AI624548, AW302992, BG260037, AI802542, AI569583, AW169653, AI800453, BE048071, BF792961, AI439717, AI567612, AI611348, AI869367, AW081797, BF343172, BG031815, AL038605, AI570781, AW051258, AI513901, AI802240, AI274728, AW071417, AI571909, BG249582, BG257535, AW152469, AI612885, AW022682, AW148320, AI569579, AI252023, AI608936, AW075413, AI500077, AI318280, BE781369, AI636585, AI251434, AI862144, BG255895, AI890806, AI625094, AI955906, AI309401, BG110517, AI431424, AI343112, AI612913, BG110684, BE895003, BG168549, AW268253, AW301300, AI349598, AI554344, AL036664, AW075207, BE886728, AI345735, AI678357, BE964078, BF872670, AI475394,

<p> AI633419, AI348897, BF904258, BE138712, AI500659, BE966699, AI247193, BE887488, BG030364, AI648684, AI313320, AI627988, AI251221, AI630928, AI340627, AA640779, AI340603, BF904263, BE910373, AV743962, AI587143, AI312146, AI312339, AA572758, AI889168, AI345258, AI348854, AW193000, BE964614, BF817926, BE965432, AW020693, AI457369, AI040243, AI445115, AI620866, AL513699, AW081242, AI610645, AI801325, AI866798, AI932794, AI689248, AI340582, BG110241, AA225339, AA427700, AI270707, BG179993, AV682672, AW827228, AI955467, AI681985, AI684265, BE895585, AW074993, AI349614, AI590415, AI811353, AI354283, BF868928, BE885241, AI564247, BG058398, AI302910, AI955917, AI349256, AW946806, AI312152, AI174394, AV682867, H89138, AW075084, AI567351, AI800433, AI950664, BE048179, AL036288, AI634224, AI349937, AW089572, AI334884, AL039132, AV651436, AI670009, AI349957, AI307708, AI312325, BF981774, AW269097, AI609409, BG036846, AI591420, AW190042, AI572892, AL045266, BF971016, AV682218, AL121286, AI916419, BF925729, BF339322, AI307520, AI925156, AI445237, BE047952, BG180996, AI306613, BE544111, BE885353, AI434256, AV708097, AV712838, BF924882, BF885000, BG113299, AV757028, AA012905, AI917123, AL134999, AW075351, AV682521, AI874166, AL036736, AL036901, BG168696, AW151138, AW268302, BG033723, AW023590, AI306705, AI436456, AI608667, AV682763, W33163, AI282281, BE785868, AW170635, BG250190, AW073994, AL390882.12, AK027164.1, AF056191.1, BC003687.1, AK000432.1, AL512733.1, AK024538.1, AL157482.1, AF177336.1, AL117460.1, X72889.1, AF090934.1, AL359601.1, AK026526.1, BC008488.1, AK024524.1, AK024588.1, BC001045.1, AL136787.1, AB047904.1, AL049452.1, AK025084.1, AK026947.1, AL512750.1, AF090896.1, AL136845.1, AL050146.1, AK026855.1, AK026597.1, AB048954.1, AB056420.1, AL137560.1, AL136749.1, AK027868.1, AK027096.1, AL359583.1, AL136844.1, AB060852.1, AL157431.1, AB060826.1, AB060916.1, AB060825.1, AB055368.1, BC008893.1, AL117435.1, AK027213.1, AK000614.1, AL162083.1, AL049464.1, AK026534.1, AJ242859.1, AL136892.1, AK000137.1, AK025524.1, AL137463.1, AF090943.1, AB048964.1, AK025906.1, BC008070.1, AB047801.1, AB055303.1, AB060887.1, AL359615.1, AK000618.1, AL137550.1, AF225424.1, AL359596.1, AL117583.1, AK026647.1, AL133080.1, AK026629.1, AL133075.1, AF125948.1, AF111847.1, AF146568.1, AL133113.1, BC007199.1, S61953.1, AK026045.1, AB060908.1, AL133557.1, AL136789.1, AB049758.1, AL122093.1, AL133606.1, BC008983.1, BC008382.1, AK026592.1, BC008417.1, AK026353.1, AB055366.1, AL050149.1, AL133016.1, AL442082.1, AL110225.1, BC008365.1, AL117394.1, AB051158.1, AL389982.1, AL117457.1, AK026504.1, AK025092.1, AL122098.1, AL050116.1, AK025772.1, AL080124.1, AL136799.1, BC003683.1, AK026542.1, AK000647.1, AB060863.1, AL110221.1, AL137527.1, AB063070.1, AF218014.1, AL049314.1, BC002733.1, AK000083.1, AL137538.1, BC008387.1, AL442072.1, BC006412.1, AL050393.1, AF078844.1, AF091084.1, AL136928.1, X82434.1, AF097996.1, AK025967.1, AK025391.1, AL080159.1, BC008899.1, BC001967.1, AL512754.1, AK026959.1, Z82022.1, AB063046.1, AL137459.1, AB063084.1, AB052200.1, U80742.1, AB056768.1, AB019565.1, AL122123.1, AF230496.1, </p>				
---	--	--	--	--

HKDBF34	282	833065	1 - 1418	15 - 1432	<p>AL137557.1, AK000445.1, AL136786.1, U42766.1, AL137648.1, AK025491.1, AL050277.1, AL117585.1, AL512689.1, AF219137.1, AF090903.1, AF125949.1, AK026593.1, AF260566.1, AL050108.1, AL133565.1, AL122121.1, AL049466.1, AB055361.1, BC006807.1, AB056421.1, AF090900.1, AK026452.1, AL583915.1, AL512719.1, AB047615.1, AL133640.1, AK026741.1, AK025484.1, AB05315.1, AL050024.1, BC002839.1, AL110196.1, AL122050.1, AJ012755.1, AL110197.1, S78214.1, AK026784.1, AL162006.1, BC007021.1, AL136768.1, AL512765.1, AL136586.1, AF090901.1, AL512718.1, AL080060.1, AB052191.1, AK026086.1, AB048953.1, AL512761.1, AK025339.1, AB063008.1, AK026651.1, AL359618.1, AF183393.1, AL512746.1, AF207829.1, AK026532.1, AL353940.1, AL133560.1, AK000718.1, AL390167.1, U91329.1, AK026865.1, AF106862.1, AF104032.1, AF061943.1, AK000652.1, AL122110.1, AL359941.1, AK027113.1, AB060912.1, Y16645.1, AL049938.1, AL133093.1, AL389978.1, AL512684.1, AK026583.1, AL049430.1, AB050510.1, AL049382.1, AL137271.1, BC004951.1, BC008280.1, AK026744.1, AK025958.1, AK025414.1, AK027204.1, BC008485.1, AB062938.1, AK026630.1, AL136843.1, AK025632.1, AL080127.1, AL162062.1, AK026927.1, AK000323.1, BC004556.1, AL080137.1, AL050138.1, AL137521.1, BC006195.1, AL122049.1, AB055374.1, AL049300.1.</p> <p>AV652853, AV653898, AF792241, AF793025, AW242855, BF940314, BE048959, BF589928, AF767568, AA999850, AF111520, AW612416, AF165078, AF173739, AF193193, AF1985237, AW779364, AF433883, AF178325, AF1671437, AF1613056, AF1253234, AF1524824, AF1650909, BE465778, AW299600, BF211834, BF431418, AF1431850, AF131483, AF1470468, AF1473091, AF1435162, BF031348, AA065156, AA076448, BF212565, BE501448, AA282824, AL134259, AF1862043, AF1801088, AW880037, AF239701, AL120446, AA159625, AF1520946, W45039, BF840674, AL035890, AW020619, AF1741637, AF229179.1, AC003669.1, AL583915.1, BC006103.1, BC003591.1, AK025099.1, AL136784.1, AL137550.1, AK025117.1, BC008686.1, BC000534.1, AK025435.1, BC009398.1, AF232009.1, AK026762.1, BC007347.1, X15132.1, AF091084.1, BC002515.1, BC006410.1, AL080234.1, AL442082.1.</p>
HKGAT94	283	762811	1 - 1034	15 - 1048	<p>AF1521417, BF991903, AF1868973, T84785, AW273454, AA601327, AW753508, AA601278, T91114, AF1821044, AF1571543, AF1791227, BG032943, AF758944, AF722075, AA055800, BF346320, AF753973, AW600804, AF148047, AF117305, BE075868, AF140392, AF1734144, BE883679, AF1041706, AW969824, AF760502, T74524, AF760154, H07953, AF763538, AA613164, AA683069, AF236698, AF1444517, BF854333, BE731411, AF1609972, AA904211, AF1583468, AA601630, AF938345, AF742485, BE885138, AF1628859, AF1084012, AW020088, AA515728, AF760014, AA613627, BF872337, AF037910, AW274078, AW274191, AL134330, AF118837, AA287618, AF1306232, AF1801141, AA601294, AF1251576, BF346590, BG055660, AF710214, AF1583466, AF664487, AF163763, AA805841, AF1119532, AF1253987, AA829065, AF962035, AF042906, AF162697, BF058000, AF249688, AF845366, AF832962, AF1491765, AF502873, AA664604, AA084609, AA829036, AF275432, AF1962030, BG236801, AF1267356, AA565006, AF193265, BE301584, AF502949, AF1244127, BE153007, AF720457, H73174, AF1347810, AF1865213, BF108874,</p>

					AA706495, AI673731, AA504951, AI583252, AC012170.6, AL445685.17, AC009131.6, AC005049.2, AC011479.6, AC068533.7, AC012309.7, AL136172.16, AL590762.1, AC022436.5, AP000907.5, AC018690.5, AC005015.2, AC009953.4, AL161670.4, AC020916.7, AC009086.5, AP002898.1, AL354864.16, AC006530.4, AC010422.7, AP000511.1, AF168787.1, AP000471.2, AF265340.1, AL162615.13, AC004799.1, AC016776.6, AF001552.1, AC004963.2, AF156673.1, AC026765.22, AC039057.8, AP002812.3, Z86090.10, AC005488.2, AC008555.5, AC006241.1, AC010412.7, AC004851.2, AC006014.2, AC005089.2, AF190464.1, AC025165.27, AC007405.6, AE006639.1, AJ003147.1, AC022211.5, AC005829.1, AC013429.12, AC010378.6, AL049539.21, AL389886.10, AC008745.6, AC011464.5, AC008747.5, AL121753.30, AC009137.6, AL132773.14, AC006441.13, AL121890.34, AL137881.12, AF196779.1, AL356257.14, AF053356.1, Z82244.1, AC006064.9, AC007383.4, AL132713.11, AL049694.9, AL096814.26, AP001748.1, AC024028.10, AL022323.7, AC084865.2, AC011491.5, AC008848.7, AL035072.16, AC005666.1, AC020983.7, AC005098.2, AC005399.19, AC010077.1, AC011462.4, AF111169.2, AC005037.2, AL591807.1, AL356057.12, AC002369.1, AC006483.3, AL138836.15, AL136300.22, AJ009616.3, AP000555.1, AC004491.1, AC025430.5, AC004814.2, AC007739.2, AC010969.11, AL139099.2, AC005486.2, AC051619.7, AC008551.5, AL049764.4, AC002365.1, AC087072.2, AL122004.17, AL109840.24, AC005412.6, AE006467.1, AP001760.1, AL031985.10, AC009412.6, AL132768.15, U91323.1, AL354808.24, AC007151.2, AL359236.4, AC008928.6, AL162426.20, AC010654.8, AP000503.1, AC011811.42, AC003101.1, AC021016.4, AL137818.3, AC005081.3, AL133387.8, AC006597.2, AC008543.7, AL161747.5, AP000047.1, AC004167.1, AC007226.3, AC005730.1, AC000134.14, AC006480.3, AC005080.2, AC005484.2, AL132825.35, AL109825.23, AL132640.4, AC010319.7, AC004980.4, AL138849.12, AC026672.44, AC004211.1, AC004765.2, AC011450.4, AF165926.2, Y18000.1, AP002852.3, AC004166.12, AL121897.32, AC011455.6, AC007003.4, AC008569.6, Z81364.1, AL445222.9, AL161779.32, AC011737.10, AC015801.25, AC006071.1, AC006211.1, AL035685.21, AC004584.1, AC010201.18, AC005020.5, AC005722.1, AL353812.13, AJ007973.1, AC016027.15, AC009039.1, AL158191.17, AF134726.1, AC004796.2, Z98304.1, AP001056.1, AL035455.30, AL161665.5, AC007566.2, AC018751.30, AC007546.5, AP001714.1, AL022320.23, AP001039.1, AL133551.13, AC007597.3, AC004867.5, AL450342.14, AC010150.3, AC005786.1, AL031311.1, AC007191.1, AC005632.2, AL356804.4, AC018808.4, Z95115.1, AL022721.1, AC005952.1, AC044797.5, AC011443.6, AC004754.1, Z85987.13, AC006312.8, AC005971.5, AC004477.1, AC010530.7, AP001630.1, AC007318.4, AC006261.1, AP001694.1, AP001746.1, L44140.1, AF207550.1, AC005519.3, Z93930.10, L78833.1, AC006330.5, AL121952.18, U80017.1, AL009031.1, AC006345.4, AL157760.9, AC021876.5, AP000210.1, AL031681.16, AC002316.1, AC002326.1, Z93244.1, AL133485.3, AL390061.9, AC008895.7, Z83844.5, AC003029.2, AC023880.5, AC008738.6, AC004472.1, AC003043.1, AC005102.1, AL050341.18, AC020550.4, AC004228.2, AC005667.1, AC009060.7, AP000115.1, AL109984.14, AL078611.1, AL359644.10, AC007216.2.
				15 - 1021	AI499498.
			1 - 1007		
	601969				
284					
HKGCO27					

HKISB57	285	625956	1 - 1478	15 - 1492	<p>BG253059, AI888563, AW083174, AI890983, BE677527, AI742994, AA581853, BE208188, AA496043, AI749573, AI433172, AA912116, AU152415, AU151244, AA526295, W72233, AI708515, AA029171, AI289783, AA147482, AW001857, BE744941, BF851250, W76470, AI148076, AI619715, W32695, AI973179, BF856405, AA086231, AI536682, AI244167, AW205328, AA112137, AI015550, AI159953, AA449234, AA449289, AI886087, R48602, AW974749, R48705, N57904, W73612, AA515533, AI095398, AA086322, AA554446, AA317019, BE019888, R07096, AA894669, AA112027, T96414, AA923651, T96497, AI581984, AI093238, AW084446, BE834394, T65129, AA100811, BF767404, AA652428, W32694, AW364698, BF371383, AW390788, AI9033419, AI9033380, AI9033350, AA300051, AW886927, H55267, AA029067, AA588851, AA588463, BF931116, BE646329, AW514396, T65909, AW578218, AW800794, R07042, AA625855, AA663955, AA687595, AI581808, R76016, W22074, AA043407, AA436950, H39017, BF814527, AI824576, AI702073, AI698391, AW080090, AI633062, AI608936, BE786043, AI358213, AI306705, AW983832, BE963838, BG179993, AW051258, AI677796, AW051088, BF856017, AI932794, AI366900, AI352497, AI889189, AW983829, AI270183, AW163834, AL514731, AI434468, AI812015, AI249877, AI679672, AW118518, BF812960, AI284131, AW029611, AI468872, AI699011, AI927755, BF792961, BE966388, AI886753, AW827289, AI564719, AV743962, BG108406, AI567846, AV741327, AI573060, AI783504, BG112718, AI620284, AI866770, AW198075, BF032768, AW083778, AI514899, AI611738, AI280732, AI619502, AI680162, AI802542, AW081255, AI280607, AI499285, AI570807, AW004886, AI452560, AW026882, AW151136, AI923370, AI627988, BF812938, AI118781, BF970652, BE789764, AW104724, AI670009, AI863382, AI433157, BE543089, BF812961, AI452993, AI624548, AI659795, AW079572, AI860783, AI633125, BF812426, F27788, AW089179, AI673785, AI915291, AI354998, AW152182, AI537024, AI917252, BE967261, BF725599, AW080746, AI120853, AW129659, AW163554, AI537677, AI499890, AI612852, BF526020, AI174394, AW192461, AI613270, AW105620, AL119863, AI520809, AI923989, AL036673, AI571909, AI803778, AI653979, BG036846, AW192687, AV682249, AL514357, AW839006, AI274507, AI632408, AI288305, AI635067, BG180273, AI612913, AL119828, AV682212, AI590686, AI435268, AI432030, BE048071, AI500588, AI628217, BE047606, AI637748, AW238688, BG029829, AF064238.3, AJ010306.2, Y13492.2, Z49989.1, AF115564.1, AF115570.1, AF115567.1, AF115569.1, AF115568.1, AL122098.1, AL137533.1, AB056420.1, BC006195.1, BC005858.1, AK024524.1, AL133067.1, AK025092.1, BC001045.1, AL137550.1, AL080159.1, AK026462.1, AK024538.1, AL512733.1, AL050277.1, AL389939.1, S61953.1, AB056421.1, BC008893.1, AL137294.1, BC001963.1, AL389982.1, AF026816.2, AL136844.1, AB060852.1, BC008488.1, Y14314.1, AF260566.1, AL136805.1, AL049283.1, AL512684.1, AK025209.1, AK026593.1, X82434.1, AK026542.1, X72889.1, AL137560.1, AL137271.1, BC004951.1, AB060916.1, AK026532.1, AF183393.1, AL137478.1, AL137556.1, AL583915.1, AK025484.1, AF057300.1, AF057299.1, AK000652.1, AF348209.1, AL353625.5, AK026480.1, AF218014.1, AF225424.1, Z82022.1, AK027213.1, AK027164.1, AK027160.1, AF056191.1, BC003122.1, AF111112.1, AB048974.1,</p>
---------	-----	--------	----------	-----------	---

HKMLK53	286	587269	1 - 1529	15 - 1543	<p>AB062938.1, AL050393.1, AK026534.1, AL122049.1, AL136915.1, AB055361.1, AK025632.1, AL122100.1, BC006525.1, AL110225.1, AL133568.1, BC004556.1, AL136892.1, BC008365.1, BC005678.1, AL080124.1, AK026408.1, AL162002.1, AL122110.1, AK026533.1, U39656.1, AL136893.1, AL050149.1, AK000418.1, AJ299431.1, AB047904.1, AL122093.1, AL050138.1, AL133560.1, AL137463.1, AL136749.1, BC006807.1, AL133557.1, AF262032.1, AB049758.1, AK000323.1, AF146568.1, AF162270.1, AL133113.1, AK025465.1, AL133072.1, AF091084.1, AK026583.1, AK026642.1, AL133640.1, AL359583.1, AK026744.1, AK025084.1, L30117.1, AK000083.1, AL133016.1, AK025708.1, AL353940.1, AL442082.1, U80742.1, AK000718.1, AL110280.1, AK026865.1, AL512750.1, AL162083.1, AF090934.1, AB048919.1, AL359620.1, AL050172.1, AL359618.1, BC004958.1, BC003682.1, AB046642.1, AL110221.1, BC006164.1, BC003684.1, AL512765.1, AL122121.1, AL137292.1, AF271350.1, AL137476.1, AK000391.1, BC008417.1, U58996.2, AB063084.1, AB056809.1, AF090900.1, AF242525.1, AL353956.1, AK026551.1, AL080148.1, AL117435.1, BC009033.1, AK024588.1, AL137557.1, AK026528.1, AK000432.1, BC006440.1, AK026947.1, AK027204.1, AB047801.1, AL117457.1, AL050116.1, AL136586.1, AL137480.1, AJ006417.1, AF061573.2, BC009341.1, AJ012755.1, AL512718.1, BC008070.1, AK027096.1, BC008899.1, AB056427.1, AF217987.1, AB048954.1, BC006494.1, AK026762.1, AK027182.1, AL512689.1, BC002733.1, AK027116.1, AL133075.1, AL133093.1, U78525.1, AL136787.1, BC008387.1, AF106862.1, AL080060.1, AL359941.1, AK000445.1, AB060826.1, BC005890.1, AB048953.1, AB050410.1, AB050510.1, AK026629.1, AK026045.1, AB050534.1, AF177336.1, AK025414.1, AL117460.1, AL136768.1, AF090903.1, AB052200.1, AK026927.1, AL117440.1, AY033593.1, AL133565.1, AL390167.1, L19437.2, AK026592.1, AK024601.1, AB063008.1, AB055374.1, AK025958.1, AJ242859.1, AF113222.1, BC009212.1, AK026452.1, AK025254.1, AB060214.1, AL110222.1, X53587.1, AK026959.1, AL162008.1, AF218031.1, BC005151.1, AB047615.1, BC004370.1, BC006103.1, AY034001.1, AK000486.1, AL133098.1, BC003548.1, AL050108.1, AL122118.1, AB062978.1, AL136789.1, AL049452.1, AK025391.1, BC008284.1, AK000647.1, AL136786.1.</p> <p>AV719458, AI168335, AA694180, AA700192, AA779968, AW445200, AI367390, BE327620, BE465306, AI075829, BE815980, AA480872, AI435331, AA491269, AI753711, AA219131, AI493234, AI718133, BG109938, AL526433, AI952497, AI635921, AI370309, R49208, AW249915, AI204676, AW250053, AA449776, AW075396, AI337952, AI190404, AA700531, AI688030, AI004332, AA197329, AI879571, AI074890, AW572387, AA137248, AI355452, AW519052, AI478681, AI282138, AA102740, AI097219, AI609526, AW150814, AA973852, AW043962, AA227433, AI352182, AA516261, AW182467, AA079672, AW118786, AI609406, AA586497, AA151289, AA166704, AU149786, AA494521, AU153322, AI393847, AU160388, AI189817, AU152961, AA775355, AA494412, AA494431, AW591557, AA853974, AI520667, AA807464, BG011983, AI159903, AW169570, AA922404, H04787, AI129464, AI359443, AW118816, AI382986, N42954, AA907178, F11058, AI380119, AI926687, BG054937, AA577675, AA595867, AU144134, AU151041,</p>
---------	-----	--------	----------	-----------	---

					<p>AU151371, AU159367, AU145655, AU154404, AU150750, AU152612, AU159804, W72741, AU146474, AU150684, AU152823, BE302039, AU152431, BE302186, AI264916, AU152695, AU149949, AA599587, AW026884, AA626907, AU126630, AA581871, N70055, W94487, AA113220, AA938624, AI560420, AI870622, AU149957, AA226953, H97353, AU151073, AI097670, AI566990, F09549, AA610724, AA563737, AA974862, AW190045, AA669938, AU155526, AU150091, AU155518, AU155060, AA630115, AU150471, AW961280, AA191360, AI571896, R80426, AU154361, AI623459, AU156338, BE514913, AU150067, AA668477, N21455, R51577, AW969431, W31704, AA113390, BE673402, F04314, AW169427, AU156568, BG027127, T03630, AA858419, AU128655, BE889857, H17933, T40459, AA514726, F02328, AI491845, AI146488, AI864856, AU149654, BE244486, AI051351, AI922910, BF217017, T96369, BF196594, T65431, AI219701, BF541494, AU152028, AA599003, AA622745, AW593587, AW023946, BG032796, AI597830, AA214185, BF207819, AA088916, R49684, R74249, AA658944, BF576972, AI351009, AA132890, AA206322, AW149981, AA902464, AA205834, AI611206, R44358, AI865177, AI247836, BG115623, AA738215, AA888726, H05448, BF819090, AU149806, AW438971, R94411, AW875840, AW608777, AA668385, AA886478, AI969952, W95370, R45623, AA338507, R45342, BE871218, AI168677, AV655304, AA488788, AW369266, T80840, F35835, N90010, AL526392, AA776246, AA343900, AI934205, AA343877, W51983, AA319087, M77907, AW369292, H05148, AA527922, R72530, AV684723, AV685840, N83245, AA657347, AW747894, F27067, R06192, BF736297, AA824348, AW166672, AC008123.9, AK026166.1, M30938.1, X57500.1, J04977.1.</p> <p>BG036576, AW376266, AW024675, AW965560, AA946948, BE834077, AA306783, AV738527, AV739697, BF241514, AV740463, AA758808, AA431001, AA910368, AA336054, AA335971, AW237846, AW827285, AI050666, AV755459, AI583054, AA764946, AA459982, AI811603, AI683160, AV734888, AV721366, AA648361, BE397723, BF970114, AI336575, BF306639, F37462, AI872164, AV694812, AW301344, AA830333, AI633321, AA678887, BE876047, AV706721, AA563942, AI245332, AA653346, BE740632, AI360195, BG177101, BG026443, AA437293, AV698290, AV706279, AI933756, AW102858, AW022121, AV656973, AW582932, AW238753, BG110384, AI345143, AI224463, AA836317, AL047398, AL041154, AI814841, AI621106, AI436429, AI364620, BE620084, AI343119, BG109221, AA100151, BF796402, AV760181, AI349012, AI627692, AA765010, BE885490, AW021373, BG033906, AV756956, AV764180, BE011885, AI559654, AC005551.1, AF217998.1, U91329.1, AK026600.1, AF197929.1, AL137555.1, AL133093.1, BC007797.1, AC004227.1, U68233.1, AK027114.1, AL359583.1, BC007534.1, AL137662.1, X86693.1, BC002688.1, BC004145.1, AF217991.1, AK025549.1, BC005094.1, BC008196.1, BC006147.1, BC007280.1, AL512746.1, AK000632.1, BC000007.1, AF111112.1, X53587.1, AL136816.1, BC006481.1, BC001128.1.</p>
HKMLM11	287	514788	1 - 940	15 - 954	
HKMLP68	288	103791 9	1 - 2770	15 - 2784	<p>AV700405, AI433307, AI478641, BF115123, AI566076, AI522321, AW272244, BE048940, AW771517, AV686299, AA931216, AI522047, BE048682, AW302179, BF593517, AI493025, BE465247, AI733508, AI253208, AW269237, AI493090, AA994816, AW194908, AI470525,</p>

				<p> BF195989, AI251700, AW302730, AW303037, AI991553, AA483217, AW302855, AW276682, AI252712, AI753542, BF588847, BF476811, BF592327, BF476595, BF476913, AW302739, AW302750, AI053773, AI053862, AI251385, BE150062, BF057909, BE139717, BG054991, BE151860, BE049019, AW271017, AI254627, BF994752, AI344886, BF994765, AI053963, AW813842, BE646225, AI053711, AI254684, BE139333, AW803234, AW302803, AI311626, AI311753, AI345102, AI308518, AI207861, AW268777, AW086339, BF588798, BF477136, BF477272, AW872616, BF000717, BF592672, BF592457, AI792443, W02028, AW085628, AI491784, AW440273, AI252858, AI611561, BE151878, AA568394, AW148344, BG250868, BF592613, AW270496, AI744801, AW170681, BF063830, AA885499, BF828046, AL110366, AW303221, NS3462, AV737541, AI400721, AW183037, BG003487, AW134612, BE350371, AW302321, BE061293, AW880188, AL041838, AV750368, AW468575, BF940671, AW268767, BE772109, AI935032, AW262442, AI310879, AI559284, BE300331, AI053588, AW148392, AA668673, AA345280, AA191610, AA223924, AA703680, BE837515, AA250763, AA206026, H80554, BF925682, AA706521, AA664331, AI254217, BE138525, BE837483, BG105129, BF222392, BF445303, BG015618, AW955564, BE067485, BG001163, AA528253, BF974534, AI073889, AA789229, AL049270.1, AC011545.4, AC004844.1, AC011286.7, AL354997.17, AL024509.1, AC016716.6, AC005553.1, AP000092.1, AF386492.1, AC007248.3, AL121777.39, AL360085.26, AC012081.16, AL021808.1, AC011456.2, AC007688.15, AL109982.1, AC006380.2, AP001835.4, AC019187.3, AL391724.7, AL358855.16, AL031655.8, AC090511.3, AL136088.10, AL157829.24, AC002461.1, AP000522.1, AL591046.4, AC006120.1, AL023653.1, AC024084.4, AC005277.1, AF001549.1, AC005017.1, AC012063.7, AL049737.4, AL445243.3, AC007350.1, AC017019.3, AL049744.8, AC004554.1, AC006210.2, U96409.1, Z83819.1, AP000066.1, AL009051.1, AC011890.4, AC005886.2, AL121590.11, AC004409.1, AC000369.1, AP001207.3, AC008085.1, AP000695.1, AF195953.1, X12818.1, AC009073.8, AL049759.10, U13369.1, AC004967.3, AC006033.2, AC012531.11, AC0091736.1, AC007464.4, AC005875.2, Z95114.19, AC025167.6, AC004854.2, AC009517.5, AL355146.13, AL133281.11, AC008838.5, AL360089.13, AC027121.5, AL137059.20, AC004147.1, AL139112.9, AC011519.7, AC018796.4, AC034242.5, AC000368.1, AL135922.4, AP001706.1, AL121754.18, AF091512.1, AC004672.1, AL035686.15, AC003012.1, AL163279.2, AC007850.29, U95743.1, AC034199.5, AC007876.2, AL391139.19, AC024082.6, AL078587.18, AL135783.6, AC008177.3, AC007160.3, AL049541.24, AC005538.2, AC006159.3, AC004126.1, AC027287.20, AL450109.3, AC008790.6, AL354755.14, AL132818.2, AL031056.1, AL355593.21, AL121949.13, AL136419.2, AL050335.32, AC002368.1, AC073898.1, AL009047.1, AP001726.1, AC006327.3, AP000946.3, Z82189.1, AC008984.5, AC005583.1, AP000696.1, AC003969.1, AC008444.4, AP000040.1, AF107258.1, AL022574.7, AC016543.6, AC005216.1, AC009518.7, AL118508.27, AJ003147.1, AC007938.1, AC006462.3, AC002080.1, AP000755.4, AL021395.16, AL132981.12, AL359854.8, AL161716.14, AL121755.23, AC005227.2, AP001677.1, AC078899.1, AC005901.1, AL356213.10, AC018840.3, AC006366.3, Z99290.1, AC010342.5, AC007277.2, </p>
--	--	--	--	--

HKMMD13	289	604751	1 - 929	15 - 943	AL389925.10, AC005386.1, AC010279.4, AL132641.3, AC008755.6, AE000658.1, AC009491.3, AL096772.5, AP000313.1, AC010148.13, AC008162.3, Z96074.4, AC007221.2, AL135961.4, AC009396.5, AL117338.15, AL137022.8, AL133173.19, AL121902.13, AP000194.1, AP001686.1, AP003113.1, AC006042.2, AL049715.25, AP001705.1, AC066606.5, AC024255.22, AL354864.16, AL445384.3, AC069262.24, AC017005.6, AC008178.3, AP002004.4, AP000684.4, AC008663.6, AL121977.11.
HKMMD01	290	527402	1 - 873	15 - 887	R69692, AI254831, BE439823, AW473380, AW967329, AI582769, AI076062, AA079635, AU148170, U95737.1, AC072061.8, AC009032.7, Z84486.1, AF003529.1, AC008687.4. BE049073, AI252114, AI792903, BE063133, AI734002, AI307426, AW301818, BE049088, AV740060, AV738722, AW105737, AW851028, AI200051, BE049095, AW406755, AW361583, AI054246, AV756693, AV758600, AI792864, AI733957, AA610491, AI334443, AI053816, AI252085, AL138242, AI358229, BF668217, AA501784, AI954260, AW966759, BE147093, AW303196, AW301350, AI254798, AW419262, BG014866, BF308728, AI431303, BG249643, F29989, BG010083, AV703137, AV701499, AV706025, AV759204, AW086257, BE147117, AV763540, BE139371, BF970654, AW950632, BF725504, AI246796, AI016000, AW074398, AW474160, AI216978, BF873504, AI349874, AA663306, AU122216, AW969988, AW905746, AV682003, BF761328, AV761745, AW833862, AV733328, BG167743, AI754689, AI654529, BF436771, AW500125, AI801205, AW970564, AI890348, AW962713, AI623720, AA41788, BF773305, AW069450, AW276984, AI963720, BE042649, BF808370, AV729809, AL138265, BE049139, AW021917, AV728425, AL040072, BF676536, BF681427, AV704740, AV701613, AW271904, AV701844, BG167139, AA557879, F36373, AV760466, AV710606, AW023389, AI281807, AF074677, BF337291, AW472872, AI569202, BF827410, AV761810, BF887156, BF917533, AV762645, AI365988, BE540527, AV705518, AU147488, AW963497, BE139267, BE205860, AV710482, AL046409, T06828, AL048616, AI754013, BE349302, AV703266, BG231767, AW339687, AV725423, AA394271, AU146189, AU145473, AI754955, BF908593, AI345695, AL118911, AW028429, AI635272, BG033926, AI285615, BE909262, BE744242, BE293802, AV729000, BF058000, BE304890, AL041690, BE293845, BF769461, AI753365, AV725974, F32705, F36273, AA555260, AV762395, AI281808, AI355206, AA128592, AW236342, AV763971, AA366035, AA501614, BG010931, BG152682, AW503666, AA932099, AA744001, AW576389, AA581903, AW970848, AI282336, AI151261, BF869171, AV740801, BF241967, AI370475, BG176793, AV763583, AA515435, BF916567, AW839174, AW979060, AV764329, AW064321, AC010727.6, AJ300188.1, AP000320.1, AL513128.11, AC002429.1, AL162374.8, AP000120.1, AP000167.1, AP000052.1, AC009502.4, AP000099.1, AP000036.1, AC010719.4, AC012306.11, AC009247.12, AC010601.5, AP001719.1, AC000360.35, AC006288.1, AC004460.1, AC002369.1, AC021016.4, AL445683.11, AC005221.1, AP001718.1, AP001479.1, AC024164.6, Z86061.1, AC004873.3, AF045555.1, AC004087.1, Z93022.1, AC087589.2, M37551.1, AL160411.25, AL359986.15, D83989.1, AC020658.6, AL390023.8, AP000314.1, AL450320.4, AB020870.1, AC017033.5, AC083866.2, AC004797.1, AC020751.5,

					AC068314.5, AC005072.2, AP001883.5, AC009229.5, D84394.1, AL137784.14, AL136231.12, AL031311.1, AL137067.7, AC025577.15, AL049589.15, AP000194.1, AL160159.12, AC024093.46, AC090514.1, AL080243.21, AC006380.2, AC011005.7, AL049714.6, AL354718.10, AC090958.1, AC003035.1, X75335.1, AC005034.1, X54176.1, AC007014.1, Z97352.1, AC011495.6, AL359680.4, AF006752.1, AB053170.1, AL049798.7, AL360158.18, AL359973.11, AL096770.16, Z93015.9, AL023579.1, AL121981.17, AL139035.27, AL133485.3, AC004526.1, AL022397.1, AK024224.1, AL049868.20, AL512590.2, AC002563.1, AL353728.8, AF349466.1, AC068513.7, AC023812.7, AP001759.1, Z95624.1, AL353802.14, AL138819.9, AL162252.17, AC005081.3, AL450336.7, AP000925.5, AL158830.17, AC090948.1, AL139800.10, AL161731.20, AC020931.5, AL121926.24, AC005988.1, AL590709.5, AC005525.1, AC005274.1, AC004606.1, AC004184.1, AF031076.1, AC008813.6, AP000297.2, AL096701.14, Z49258.1, AP001729.1, AL137017.9, U67221.1, AC000094.3, AC011235.4, AL137796.6, AL035367.5, AP001233.4, AC007878.2, AL133454.6, AL133397.1, AL356776.21, U18393.1, AL079342.17, AL136101.7, Z82244.1, AL354720.14, AP000354.1, AC005625.1, AL132986.4, AP001961.2, AL161454.10, AC011904.3, AC005480.3, AP001716.1, AF031078.1, U95743.1, AC022150.5, AP001428.1, AP000153.1, AL049539.21, AP000012.2, AF030876.1, U18391.1, AC015933.8, AL049588.11, AC009316.3, AC007021.3, AL391001.12, Z83844.5, AL136172.16, AC018801.4, AC005840.2, AC009196.13, AC016587.7, AL109801.13, AL139396.17, AC022407.6, AC005000.2, AC019178.7, AL035450.1, AC005488.2, AL023755.5, AL389925.10, BC000726.1, AL356499.16, AC066612.7, AC004913.2, AC012512.7, AJ006345.1, AC087863.9, AC006512.12, AP002371.3, AC025771.5, AC024589.4, AL035415.22, AL139020.5, AL121902.13, AL450104.14, U57005.1, AC024082.6, AL157791.4, AL122035.6, AC002365.1, X55925.1, AC004417.1, AL138721.16, AC003013.1, AC004987.2, AL512378.7, AP000475.3, U57007.1, AL355144.16, AL157821.14, AL109946.12, AL050306.5, AL365364.19, AL161742.7, AC005670.1, Z98744.1, AC022415.5, X54180.1, AL136131.15, AP000952.2, AL035658.7, AL035455.30, AC024060.5, AP000302.1, AL035400.13, AF148460.1, AF015155.1, X55931.1, AC017080.8, AL121891.22, AL035681.13, AL358133.11, X60459.1, AC011242.8, AL049870.3, AL137059.20, AB003151.1, AC011247.10, AP000044.1, AP000112.1, AC010285.4, AJ277546.2, AC005696.1, AP001604.1, AF196779.1, AC010326.6, AP000884.1, AL034419.22, AP000263.1.
HL2AC08	291	610018	1 - 1464	15 - 1478	AL514822, AV716855, BE797339, BE889786, AW993482, BE778704, BE784148, AI064951, AW993281, AV649573, AW993282, BF030967, BG171338, BG253627, AW992854, BF339378, AV716022, BF699835, BF036931, AA670112, BF672645, BF214975, BF208494, BE567595, AA356542, BE003103, BG250954, AA356578, AA913737, AI0909198, BG114769, AA353906, AA263131, AV736179, AW674899, AA732423, BE907740, AA356577, R79616, BF696689, BE080437, R34190, T72824, AA206943, BF209735, AA318503, BF700002, N78351, BF034898, BF340141, BF799849, BF210023, BE874285, AA471271, BE706224, BF034728, BE003256, AL080080.1, AB048246.1, AL591807.1, AC011290.3.

HL2AG57	292	695733	1 - 1766	15 - 1780	BE541697, AW955830, AI829139, AW264273, AW070588, AA872984, H06954, AI369038, AW134647, AA974445, AA902284, AI904699, H14753, BF110637, AW006498, AA970510, H06955, AW843696, AW885852, BF895113, AW243991, BF752088, AA306732, AW603435, AA333155.
HLCND09	293	117204 6	1 - 1970	15 - 1984	AL524468, AL516965, BF341800, AU118258, AI832149, BF341727, BE910678, AU152725, AA253498, AA927669, AW136320, BF966942, AA284897, AI341987, AI375638, AI141878, AA410733, AA724418, AI656580, AA626359, AA633990, AA210941, AA480438, AI499844, AI498056, AW135997, AA595691, AA209463, AI804771, AI199374, AI278733, W52189, BG056386, BG056746, AA602519, AA253394, BF347961, AI189792, AI151483, AI242359, AI278938, AA456100, AI831279, BG036545, N51328, AA455603, BF841465, H22614, BG056059, R55869, AA496421, W96552, AA284720, T16865, BF341594, AI913942, AA904546, R55788, R90922, R87952, R87953, R25653, AW594694, T16864, AL524469, H20796, AI673432, BE262953, BF313400, AU130842, BE383565, AI954640, BE314810, BE262857, BE909511, BF929734, BE383513, BG036698, BE274853, AI631375, BE262592, AI380914, BF312256, BE262689, BF313886, BF530315, BE262731, BF315588, BF316121, BE277386, AW896204, AA969376, AI123164, T06607, BE262961, BG056600, R90921, AI355743, R27502, BF953012, AA338810, BE388421, R90911, BF954780, AW975618, AV718692, AV718489, AV742732, BG170993, AV724520, D51799, AW966053, AV699550, AW978634, C14429, AW966531, D80227, AV718800, AW966062, AV699927, AV722801, AV720731, D80038, D80269, D80166, D59859, AW973307, D58283, AV719822, D51423, D59619, D80210, D80240, D80253, AV719324, AV720211, AV719557, AV699447, D80212, AW959570, AV723927, D81030, AW949656, AW949642, D80195, D80188, AV719468, AW975621, D80219, AV720203, AV719188, AW949629, AW966534, D80391, AW960553, AW959628, AV719783, AV720028, AW965177, AW949646, AV718844, AV720464, AV718770, D59889, D59927, D80196, AW966054, AV718440, C14331, D80043, AW949645, AW949631, AW949633, AW949657, D80193, D80366, AV742048, AV721386, AW965158, AV741220, AW949641, AW949633, AW949632, AV720791, AW973447, AW959582, D80024, AW949653, D80022, AV700889, AV720812, AW959202, AW966013, D80378, D59275, AW966041, C75259, AV723097, AW978661, AW949658, AW959597, AW949618, AV742735, AV742001, AV701335, AW975605, AV701043, AV701332, AV701017, AV701248, AW966050, AV701431, D80045, D50979, AV738340, T03269, AW949654, AW949655, AW973541, D50995, AW966043, AV718633, AV720654, C14014, D57483, AW964468, D59610, AV645389, AV742667, AV645344, AV701125, AV718931, AV701166, AW960465, AW964488, AW964737, AW966022, AV700229, AV719628, AV699669, AV701443, AW959799, D59502, AV719049, AV699746, AV681510, D80241, AV681491, AV720220, BC009378.1, AL353953.1, AK023117.1, AF271371.1, X67155.2, D34614.1, D88547.1, Z82022.1, AF058696.1, AB028859.1, U79457.1, AB002449.1, AF188698.1, BC004265.1, BC003104.1, AK025084.1, AB048954.1, BC002386.1, BC006198.1, AL389935.1, AL117432.1, BC007852.1, BC003614.1, BC007241.1, AL117416.1, AK025209.1, AF061795.1, AF151685.1, AL137480.1, BC003052.1, AY034001.1, AL122123.1, AB050431.1, AL110225.1, AB050510.1, AL133049.1, BC001098.1, BC004196.1,

					BC003591.1, AK025099.1, BC006103.1, AK027146.1, AB063079.1, AL136754.1, AL117435.1, AL136749.1, BC007680.1, BC001206.1, AB060879.1, BC004951.1, AL050172.1, AF073483.1, AB063093.1, AF132730.1, AL442082.1, AL137627.1, AL137557.1, AK000074.1, AB060852.1, BC003683.1, AL133081.1, AL110296.1, BC007674.1, AL136893.1, AF262032.1, BC000707.1, AF068229.1, AL133113.1, BC002750.1, AK024546.1, BC007053.1, AK027096.1, BC001967.1, BC004324.1, BC001844.1, AL136882.1, BC005002.1, AL133054.1, BC007248.1, S77771.1, AL137555.1, AL133072.1, BC007364.1, BC004945.1, BC004883.1, AK026480.1, BC004899.1, AL080074.1, AK025119.1, BC000054.1, BC003120.1, AK026462.1, AL110280.1, AK024570.1, AK027081.1, AL122050.1, AL137459.1, AK027164.1, AB047631.1, Y14314.1, BC008895.1, M85165.1, AB060842.1, AF017790.1, AL031984.13, D50010.1, AK024594.1, AK025465.1, AL137267.1, BC009294.1, AY026527.1, BC000632.1, AK026550.1, AK026894.1, BC000713.1, AK025391.1, BC007207.1, AF218005.1, AK026762.1, AL157433.1, BC008365.1, BC009026.1, AK025208.1, AB056420.1, U68233.1, AK027142.1, AL137533.1, U62966.1, AL353956.1, S76508.1, M79462.1, AF352728.1, AL390167.1, AK026534.1, AB060893.1, BC004222.1, BC002535.1, BC008717.1, AB044547.1, AK026603.1, AK027210.1, U42031.1, AL583915.1, BC008078.1, BC006287.1, BC004556.1, AL389982.1, BC001655.1, BC007021.1, BC001369.1, AK026647.1, AL133637.1, AL110218.1, BC009231.1, BC008070.1, AK000418.1, AB050410.1, AB060837.1, BC006440.1, AB048881.1, AL157464.1, AK027200.1, AB063040.1, BC008723.1, AF217982.1, AB056809.1, BC001056.1, AL050170.1, BC003122.1, AK026542.1, AF026816.2, BC003658.1, AL050277.1, AL162008.1, BC004529.1, AK027129.1, AF143723.1, BC007255.1, AL136915.1, AF151109.1, AB055368.1, AB033111.1, AL354776.15, BC008751.1, BC008417.1, BC005070.1, X66417.1, X61970.1, U88966.1, BC009284.1, BC008196.1, BC009311.1, AK026374.1, AK026528.1, AL137478.1, AK026057.1, AK024601.1, AL359600.1, BC005021.1, AK027160.1, AB052200.1, BC007534.1, AK000206.1, AK000489.1, BC006195.1, AK026855.1, AL137476.1, BC004191.1, AK026649.1, AC010605.4, AL110159.1, BC002688.1, BC004937.1, BC000853.1, L19437.2, AL136622.1, BC007996.1, BC008649.1, BC007748.1, AF285836.1, AB048913.1, BC006408.1, AL136828.1, AL117583.1, AL110197.1, AB050533.1, BC003569.1, AK027182.1, BC008485.1, AK027217.1, AL122098.1, AK025798.1, BC002471.1, BC002523.1, BC002356.1, BC004333.1, AK025015.1, AF205861.1, AL157482.1, AL122118.1, AL080129.1, AL162004.1, AL137665.1, AL137550.1.
HLD BE54	294	836041	1 - 1208	15 - 1222	AF250847.1, AL450382.6.
HLD BX13	295	815665	1 - 1801	15 - 1815	AI632044, BF871813, BF747135, AW630757, BF873312, BF770534, BF813448, AI608881, AA101562, BE792267, AI687737, BF771639, AA513370, C75490, BF848642, AW999404, AA861308, AA890390, AA486100, AW190875, C75621, AW339937, BE871109, AW338261, AI799264, AI193265, AA149993, AI469580, AW936241, AI925871, AI002582, AI955238, AI333843, AA486163, AI241578, AA702259, T86963, AI263270, BE350662, AI093487, H57108, BE934125, BF747862, BF807059, BF813934, R01692, AA837819, BF849699, BE927881, AW936086, AA714224, BF984148,

					BE927955, BF871808, AV725597, AI273968, BE386265, AV726550, AI350492, BF946044, AI633478, AW877520, AA342901, AW419262, BE063486, AI653886, AI761471, AA641989, AU147898, AW502975, BF998270, AL120483, AW903691, AI306524, AI312259, BF842579, AW405759, AC005899.1, AL355593.21, AC006026.2, AP003352.2, AC004491.1, AP000133.1, AP000211.1, AL163032.3, AC078962.30, AL163282.2, AC009756.9, AC010458.5, AL160471.5, AC008543.7, Y07848.1, AP000563.1, AL590762.1, AL031666.6, AC008498.3, AC009247.12, AC007666.12, AL049761.11, AC008982.5, AC022211.5, AC007850.29, AL136418.4, AL139054.1, AC020934.7, AC006126.1, AC024163.2, AP000692.1, AC005412.6, AL109804.41, AL354707.17, AL158830.17, AC010271.6, AP001630.1, AC006071.1, AC000052.16, AL137818.3, AC007216.2, AL035072.16, AL162505.20, AP001711.1, AC005067.2, AC008891.7, AJ009613.4, AC011559.3, AC022087.8, AC005193.2, AC010422.7, AC005324.1, AC003086.1, AL109627.18, AL109628.5, AC005632.2, AL031668.23, AL132640.4, AC008392.6, AC003962.1, AC006337.4, AC005280.3, AL136137.15, AC006515.7, AL049759.10, AC011464.5, AL513008.14, AC004975.2, AC008812.7, AC026061.8, AC005399.19, AC025588.1, AL109811.39, AC008745.6, AC005755.1, AC007676.19, AL512843.4, AC009131.6, AC0090942.1, AL118520.26, AC005808.1, AL356299.16, AC005516.1, AP000555.1, AL355480.22, AC006468.9, AC004883.2, AC008044.4, AL035587.5, AC002544.1, AL157838.24, AC020913.6, AL096791.12, AP001725.1, AC018663.3, AC011452.6, AL031003.1, AC020983.7, AC006139.1, AL035659.22, AC016554.7, AL139809.16, AL096701.14, AC004019.20, AC008115.3, AL356257.14, AC011495.6, AC003109.1, AP001695.1, AP000113.1, AP000045.1, AL117381.32, AL035086.12, AC027124.4, AC018842.5, AC006449.19, AC011737.10, AC004257.1, AL121653.2, AL591034.5, AP001717.1, AP001748.1, AP001760.1, AC004821.3, AC005527.3, AC011465.4, AC008622.5, AC011497.6, AL359400.4, AC007564.9, AL034429.1, U95742.1, AC004224.1, AL138836.15, AC000102.1, AC000075.2, AC009077.7, AL161669.5, AL161624.7, AC007536.9, AL390798.3, AC083884.6, AC004971.3, AE006639.1, AF254822.1, AC073542.4, AC009060.7, AC022148.5, AP002849.2, AL391114.12, AC007963.7, AC007637.9, AF207907.1, AC008753.8, AC008440.8, AC011490.7, AC037475.9, AL031680.20, AC006211.1, AC022407.6, AL138724.12, AC006334.3, AL357137.7, AL159191.4, AC006948.4, AC005052.2, AC005253.1, AF243527.1, AL138720.19, AC006512.12, AP000049.1, AC004531.1, AC015651.18, AC027129.5, AC004167.1, AC074270.25, AC020916.7, AL121594.6, AL035405.10, AF109907.1, AL354932.26, AP001671.1, AC005520.2, U91327.1, AF111168.2, AL158172.5, AL139113.21, AC008521.5, AP001712.1, AC007021.3, AC010627.5, AC067742.5, AL139022.4, AL031847.17, AC008569.6, AC007404.4, AL009181.1, AC006538.1, AL355497.14, AC004999.1, AC009432.7, AL021155.1, AP000311.1, Z93015.9, AL078461.38, AC009137.6, AC005236.4, AP000557.2, AP001715.1, AC007308.13, AC005225.2, AC022234.3, AF172398.2, U47924.1, AC026794.4, U91326.1, AL355922.4, AC004882.2, AC000360.35, AC004974.1, AC018633.2, AL050335.32, AC011453.4, AC011450.4.
HLDNA86	296	135219	1 - 1332	15 - 1346	BF982559, BG034488, BE313144, BE794497, BE910635, BF314688, BG120997, BF969005, BF340441, BF306972, BF525733, BE875593, BF792430, BG030710, BE262728, BF315735,

					<p>BE314135, BF205034, BE276651, BE387269, BE391657, BF204545, BF203164, BE266232, BG027046, BE260130, AA643840, BF195525, AI832232, BF058723, N63475, AI869318, BE018923, AA205661, AI765058, W72049, AV687411, AW961121, AI808064, BF304202, AW026472, AA034035, AI765242, BE393296, AI127262, AI277854, AI884693, AW872762, AW248507, AI073710, AI376148, AI765029, AW024138, BF061732, AA708126, AW439832, AA146971, AI498928, AI339947, AA813521, AI955852, AI347608, AI123913, AI147240, AA553820, AI301956, AW242703, AI311112, AI304651, AI268993, AA156956, BF435947, BG222313, AI694928, AI075899, BE295615, AI346935, BF195494, AI560747, BE669425, AW839917, W79426, AV687766, AA781466, AI342962, AA033915, AA625788, AW800090, AI090370, AW079287, R47883, AI338271, AI969210, AA041385, AW136724, AA399114, H99183, AW404352, H94295, AA770182, W46277, AA836303, AA741397, N23743, AA974145, AA044694, N24466, AA709462, BF889167, AA398056, AA156864, AV683814, N35718, N40747, BE140096, N94773, AA146970, AA708782, AA704970, AI686517, AI597845, AI038344, H81310, AI374736, W76401, N32448, AA868201, BG152852, AI291572, AA478010, AI497678, AA468399, AA468439, AW968213, AA478165, AI423158, N30038, AA707176, H81366, R47882, AA127044, AA298982, W95282, AI219428, BE928658, AW204374, N36015, AW243034, AI203479, H45882, AA041191, W94777, N59833, AV661716, H94190, AA704288, AA991336, AA745913, BF081714, AA993215, AA025410, R06215, AA298843, AI341986, AI379942, AA513969, AW204258, AW000874, AA125766, BE645626, AA935742, F27351, BE833225, AV708035, AA542901, W79326, AA564888, AA296786, AA970265, AA564958, AI761938, F30350, AA041429, AI220792, AI869708, AI762149, AI357603, AA297517, AI357554, AW090329, AW235465, AI919010, AW188811, BE312203, AA298624, AA298368, BF591489, AA041425, AI956005, AA298370, AI749204, BF311814, AI867544, AA296693, N44247, AA045652, AI369692, AI365332, AA029123, AA918262, AV687884, AA846379, AI269986, R36822, AI915437, AI566992, AA297475, AV687881, BE090937, BF889173, F30226, AA205774, T24460, N76364, BF750936, BE066853, BC002911.1, BC000215.1, BC000828. 1.</p>
HLDON23	297	636083	1 - 1248	15 - 1262	<p>AL529086, BE904120, BF337766, BF345489, AV706125, AI681123, BF002270, BF055322, BE856092, BE305227, BE219427, BF438375, BG149525, BF057786, BF590112, BF196165, AI741848, AI636347, AI973055, AI554720, AI871117, BE220195, AI745311, AW192924, AW340966, AA706712, AI091179, BF445900, BE645773, AI677802, AI889659, AI804323, AI688189, AW673266, AI298377, BE046787, AA535027, AW612722, AI830304, AW675294, AI139157, AW089901, AA410579, AW073842, AW316637, AA417232, AA416567, AI827376, AI372513, AA411560, AW001905, AI796719, AW673062, AI334363, AI085075, AI400032, AI452964, AA308319, AI888902, AI400560, T33187, AA877699, AI332395, AI372512, AA485507, AA017127, BG178589, R85136, AV705959, AL526358, BG056798, H94860, BF476221, AW016699, BF594282, R18537, AA988884, AI925753, AA993373, AW953175, W05059, AI263531, AA282629, F29641, R01402, AA625328, AA126985, AA354334, H58095, BE251679, AW662030, AI559961, AW337874, AA282410, AI014243, AI671403, R41526, AA485352, R43109, Z39066, BF925559, F04091, R01401, W04796,</p>

HLDOW79	298	847396	1 - 975	15 - 989	<p>AV751453, BE871534, AA128150, AW375092, BF237662, BE155754, T25085, F17839, AW371533, N74669, AW058382, AW371557, BF063353, AL360256.1, AL117482. 1.</p> <p>AA702685, AA470133, AI640188, AA442232, AA442756, AI566333, AI452429, AA442897, AW015092, BE222033, AA868769, AW300514, R01436, AA429745, AA705797, R00763, AA398423, H79642, BF087494, BG259284, AA252129, AI298508, AW272706, AA316913, AA705374, AW860285, BF913689, BE885241, AA641818, AA805708, N49165, AA665587, AL040011, AV682124, AI538564, BE047833, AW673679, BG028116, AI537643, AI564716, AI927233, AI954422, AA653252, AI494201, AA808175, AA746607, AL118781, AA693331, AL514093, AI570807, BF725644, AI633125, BF871314, AI582966, AW152182, AI537677, N71199, BE886291, AW079432, BF970652, AI096771, AW021091, AI829495, AV758806, BE974031, AA504514, BF836158, AI244105, AV656903, AI521799, AI884318, AW089275, BG107566, BF039003, BF812961, AI623662, AA928539, AW051088, BE048235, AW162118, AW020419, BE875959, AW160363, BF965053, AW088691, AI915291, AA888196, BG026969, BG105501, AI500061, AV682403, AI500588, BE047852, AL120853, AI623941, AI621341, AL041996, AI890214, AI254727, AW162194, AW022636, BF751288, AI365256, AI567128, BE876011, BG115134, AI886055, AW059568, AI859991, AV743129, AI669864, AA830596, AW088560, AI473536, BE790023, AI871703, AW167021, AI539260, BE906584, AI589428, AW327693, AA502794, AV757293, AI554516, AI433611, AL043070, AI345688, AI432030, AI150993, AI918408, BF525834, AI434731, AL046926, BG107834, AI698391, AI932794, AL036548, AI859240, AI702073, AI538850, AI699056, BG029086, AI473451, AI619820, BF997967, AI370623, AI889189, AI890907, AV682366, AI536685, AI824576, BG255493, AL514627, AI433157, AL513755, BF971001, AI274768, AW020095, BG113385, BF672397, AW080076, AL513901, AV746791, BF766529, BE786834, AV735890, BF055737, AV729336, BF814450, AW090071, BG113299, AA225339, F35882, AA732937, BF686473, AI540676, AI670009, BF814072, AW952456, BF038002, BF680133, AW880037, AI287862, BE881711, AI934259, AV703169, AI815232, AI678688, AA832154, BE909009, AW168705, AI811422, AI335411, AI910639, AI582932, AI872423, BE963954, BG117375, AI249389, AV727787, AI915295, AW004595, AI579901, AW827289, AI591310, AI521560, AI610667, AL514721, BE966699, AI690687, AI587489, AV681579, AI539560, AA834534, AI866469, AV734185, AW968336, AL042954, AI334445, BG164371, AW025943, AW079409, AA568405, BG027679, AI538829, AW198090, BG251435, AI783997, AI242246, AI522052, AI923989, AL048644, AW238688, AW083374, AI933992, BG252914, AI950877, BE966278, BF811804, AI440239, BF724894, AI887163, AI868204, AI738854, W74529, BE138941, AI471429, AI345417, AL513743, AI628331, BC002444.1, AF195092.1, AB049892.1, BC004181.1, AL136844.1, BC000714.1, Z82022.1, AK000418.1, AF132730.1, BC007680.1, AK024538.1, AL122100.1, S78214.1, AK000421.1, AL353956.1, BC003410.1, BC003052.1, BC002413.1, AL117394.1, AL137627.1, AL162085.1, AK024546.1, BC001967.1, BC004310.1, BC003122.1, BC009294.1, AK026389.1, AL136766.1, AF218034.1, AK025092.1, AL117460.1, AF227198.1, AL133559.1, AL137267.1, AL049283.1, BC001328.1, AF114784.1,</p>
---------	-----	--------	---------	----------	--

				AL389935.1, BC004368.1, AK000655.1, BC007767.1, BC000317.1, BC007567.1, X95876.1, AL137459.1, AL137538.1, AB047801.1, AL050149.1, AL117435.1, AL157433.1, BC004943.1, BC005007.1, AL390154.1, AF217987.1, BC001964.1, AB060903.1, AF352728.1, AL050277.1, AK026522.1, BC005021.1, AK026571.1, AK024747.1, AL137529.1, AK000310.1, AL137256.1, AL096744.1, AL080129.1, U77594.1, AL353957.1, AK000247.1, AK026528.1, AK027142.1, AF000145.1, AL391244.1, AC026431.3, BC006164.1, AF069506.1, AL136789.1, BC004556.1, AB052191.1, AL137665.1, AF183393.1, BC000199.1, AL137478.1, AB050410.1, AK000137.1, BC006103.1, AL157483.1, AL050278.1, AL137254.1, S77771.1, AL137479.1, AL122110.1, AK027113.1, BC008416.1, BC003104.1, AK025119.1, AB048975.1, BC008282.1, AL137533.1, BC006195.1, AB047904.1, AL354828.12, AL031346.8, AL049324.1, BC003687.1, AK024588.1, AB060856.1, AF126488.1, BC003684.1, AF061943.1, BC003056.1, S61953.1, AL136767.1, BC002359.1, BC003651.1, AL162008.1, AL389978.1, AK026480.1, AL136640.1, AL133080.1, AF067420.1, AL110197.1, AB063074.1, AL512746.1, BC000316.1, AK027164.1, AB050431.1, BC005843.1, AK026038.1, AK025465.1, AL136787.1, AL136784.1, X98834.1, AJ406932.1, AK027868.1, BC000725.1, AB060229.1, AF026816.2, AF100781.1, BC008781.1, AK024594.1, AF162270.1, AK026642.1, AB060893.1, AL137523.1, AB047947.1, AL133075.1, BC004131.1, AL117457.1, AK025113.1, AY033593.1, AF201468.1, AK025383.1, X61970.1, BC004883.1, BC007206.1, BC005678.1, AB050411.1, AL080159.1, AB060883.1, AB049900.1, L30117.1, AK000083.1, AL122098.1, AK025015.1, AL136882.1, BC006465.1, AF179633.1, AL445528.16, AL133560.1, BC007053.1, BC004923.1, BC007381.1, AL157480.1, AF073483.1, BC002485.1, AB047930.1, AK024944.1, AK027260.1, AK026434.1, AL583915.1, AJ406937.1, AC023880.5, AF206503.1, AL080124.1, BC008185.1, AF078844.1, AL080060.1, AF218031.1, AK026045.1, AF141289.1, BC002409.1, AK025375.1, AK025084.1, BC007456.1, AJ406930.1, AF017790.1, AK025798.1, AK026494.1, BC002386.1, BC006198.1, BC008840.1, AL136565.1, AL137275.1, AL353940.1, AL136864.1, BC004264.1, AB062978.1, AF061573.2, AF081197.1, AF081195.1, AL110218.1, AL136900.1, AL136749.1, AF095901.1, AC044797.5, AL389939.1, AK025889.1, BC008070.1, BC008649.1, AK026597.1, BC002356.1, AB055370.1, BC002535.1, AK025958.1, AK026741.1, BC006159.1, AK025254.1, AF260566.1, BC002697.1, AL136752.1, AJ001388.1, S76508.1, AL050366.1, AK000690.1, AF285167.1, AL050322.13, BC005002.1, BC007375.1, AF097996.1, Y10936.1, X83544.1, AJ299431.1, AK026541.1, AF131821.1, AK026744.1. 1.	
HLDQC46	299	847397	1 - 618	15 - 632	AW274515, AA442374, AL522283, AI806931, AI928433, AI092561, AA628013, AI184518, AW262020, AW363180, AA729980, W92109, AL516443, AI436261, AA659720, AW340561, AI803297, AI802763, AA527556, AI186442, R77144, AW593087, AA953344, W91980, AI444603, R54966, AI799506, AI831001, F24469, AI934101, Z38258, AW451099, BE813043, AW956287, H00226, AI028279, AA649995, T35406, F35703, W23709, R71423, AA548429, AL530766, R77145, W35309, AL522284, N39838, AI940309, BF527253, H27628, BE896237, H44089, AF327923.1, AC006330. 5.

HLDQR62	300	753742	1 - 2558	15 - 2572	BE876197, AU133975, AW170131, AV723948, BG178057, AV652458, AW836234, AW608052, AA047046, BF104746, AA486037, BE395776, AW385580, AA488655, BE699041, AA932253, BG104619, BF671350, AA854943, AA418105, AA829456, AA243385, BE699051, BE936060, AI346694, AA418007, AA503398, AA053835, AW067836, AA878478, AI309218, BF820483, AA287990, W37960, AI401102, AI279485, W37900, AI423510, AA610711, AI050735, BF939011, BE699047, AA701403, W30974, AA017371, AW385388, AA911160, BF928600, H10281, W32542, AA133579, AV721259, H81907, BE908122, H11712, AA657490, H09562, R97956, BF810354, N68428, BF841567, AA018681, BF810349, AW838671, AW274397, BE699044, BF737894, H17436, AA133578, T03483, BF529092, BE699011, R93915, T84200, H10225, R97955, N91220, F09018, BE244933, BE697384, AW474873, Z43397, AA677745, F11358, AW838680, Z42508, H08994, H11779, R18755, AW067888, H86384, R20010, R44826, T78746, BE546845, BF768165, AA676360, Z41104, R12303, R61069, H80952, H01770, BF362799, AA857228, BE092626, AW361033, BE246721, R12953, F11514, AA298600, AA233314, H82000, Z45386, AA047038, AA988879, AA776420, R61792, BF925722, F02025, H37922, AA946813, AA058662, BE793798, AA298811, AW954042, AI024907, AA515707, AA579408, C02381, H38137, H80857, AA190438, AA059270, AW953912, W32541, AI253018, BF755527, AA252608, H39230, BF87406, BF841077, BE699066, F09175, AW608049, R36072, AW607934, AW242636, F02790, AA018740, BE092426, N47523, AW951415, BE872758, AA670010, BF793691, H86054, BE699208, AA017201, AA059226, BE857637, BG011131, AA233315, AW169463, BE935974, AA910836, BF756516, AA504287, AA489248, AW452612, BE858890, BE699076, AA953019, AA191764, BF930488, BE746764, AA552521, BF932022, BE080981, AW385586, BE092405, BE047109, AW838675, BE074538, AB046801.1, AC026749.5, AC026437.5, AC010491.3, AK001799.1, AF274753. 1.
HLDQU79	301	740755	1 - 1474	15 - 1488	BG256275, BE867624, BE907396, BE855521, BF034422, BF530803, AW959247, BE782005, AI126689, AI121446, AA757065, AW630129, BF768037, BE746763, AA206154, AA460401, AI276320, BF998689, AA295243, BE242732, BG035901, AL040350, BE242810, T86168, BF983867, W05088, AA347337, BG252443, AI133502, AF064093. 1.
HLDRM43	302	846330	1 - 595	15 - 609	AA502331, AW444616, AA568450, AW592433, AA503839, AI017393, AW957011, T85589, T78178, T72043, T85588, AI699382, BF593574, AA299977, T86494, AW956056, AW605240, AA335186, AA551860.
HLD RP33	303	647430	1 - 598	15 - 612	AP000301.1, AP000045.1, AP000114.1, AC005080.2, AC004878.2, AP001717. 1.
HLHFP03	304	460467	1 - 599	15 - 613	H46196, AI421986, H19572, H46195, BF947135, H19490, BF738481, BF994257, BF127477, AW139949, BF947011, AF321824. 1.
HLHFR58	305	919888	1 - 1001	15 - 1015	R09539.
HLIBD68	306	778073	1 - 1008	15 - 1022	AL538046, BF975484, BG260893, BF062040, AW250850, AW954319, BG118275, AI633756, AI436560, BE646174, AA975057, AW302253, AI651397, AI825665, AI479926, AI635567, AI612806, AI640598, AI653427, AI248825, BF770160, AI333221, AA609320, AI916748, BF346659, AW001438, BF941021, AA397893, AI083783, AA399663, AA302889, AA484860, AI659648, BF222019,

						AI692578, R49550, AW016187, AA393712, AI673346, D80738, D81106, D81495, D81643, C15479, AI696498, C15522, R42643, AI761655, AA302888, D81794, D81487, D60344, AA302884, AA302883, BF813253, AA091824, BE743563, N49704, AI476597, D81533, N87760, BE396027, AA352126, AA281538, AA280240, AL133447. 1.
HLJCQ90	307	791828	1 - 1752	15 - 1766		BF980403, BF726329, AI984197, AI192533, AI559494, AI378638, AA430026, AI061413, AW172705, BG165333, AI190915, AA430235, N62729, AI689890, AI360764, AA705532, H90333, H30177, T99745, H78217, T86019, H26993, T91236, AV645894, AA330598, N75483, H42449, BE766728, AW135351, AA976652, AA383620, BE220880, AI630095, BF381551, BF767606, BE087130, H42847, W05293, AA911697, AI659925, BE766726, H82733, T99746, BF889067, AW955970, AW971740, AI432644, AI431328, AI623302, AW968355, AI431347, AW972091, BE672759, AI432653, AI431230, AI432654, AI432655, AI431310, AI431312, AW081103, AI432677, AW968356, AI431323, AW972093, AW968729, AI431354, AI432661, BE672719, AI431307, AI431316, BE672732, AI431337, AI432650, BE672745, BE672748, AI431238, AI492519, AI432675, AI431350, AI431231, BE672767, AW972092, AI432651, AI432647, AI431243, AI431330, BF448552, BE672742, AI432662, AI431248, BE672644, AI432657, BE672774, AI432649, AW972090, AI791349, AI431257, AI432665, AI431247, AI431318, BE672738, BE672792, AI431235, AI431321, AI431315, AI431246, AI432643, BE672743, AL042519, BE672640, AW129223, AL042931, BE672622, BE672627, AI492510, AL042729, AL042832, AL047611, BE672754, BE672626, AL043295, AL357075.17, AF064854.1, AL133082. 1.
HLMBO76	308	626831	1 - 801	15 - 815		BE962422, AW027068, BE617458, AW978331, AW992560, AW274834, AW131841, N32595, AI917820, AI907429, AI610587, AI348386, R50855, T16683, AA807222, R42665, R45605, R15777, N47819, AI699177, Z39130, M85559, AB033057.1, AF275817. 1.
HLQBE09	309	520375	1 - 619	15 - 633		AI742329, BF109853, AA778549, AI764973, AC005225. 2.
HLQDR48	310	130772 6	1 - 975	15 - 989		AV655891, AV718605, AV690404, AV719284, AA923549, AI950351, AV656411, AV720179, AV654765, AV656119, AV697855, BF511595, AC011472.7, AF271350. 1.
HLTAU74	311	853614	1 - 1510	15 - 1524		BG003917, AI817406, BE545490, AW380189, AW161631, AW971418, AI732482, AI732481, AA506465, AA455434, AI791436, AA506457, AI791435, AA455961, AI805870, BG003913, BF889164, AW512931, AI791316, AI791270, BE892615, AA361022, T52193, BF091793, AA410873, AA376333, BE250549, BF149315, BE925340, AA410708, BE699783, AW890323, BE276496, N95142, AC008088.8, AC004702.1, AC006251.3, AC008569.6, AL132640.4, AC004707.1, Z98742.5, AP001717. 1.
HLTDV50	312	520231	1 - 756	15 - 770		AV712119, AV659712.
HLTEI25	313	396672	1 - 829	15 - 843		
HLTEJ06	314	543017	1 - 603	15 - 617		AL525142, AW274273, BE327124, AI885095, AI885299, AA085210, AW340136, AI985381, AI369742, AW086489, BE298417, AI476470, AI039658, AI034384, AI333584, BE298210, AA455921, AI287650, AW592624, AA456390, AI266556, AI672315, R14963, BF688522, AI310815, AW962407, AA902537, AW954994, AV707146, AW960308, AW952064, AW960237, AW965813, AW963378, AW963660, AV703158, AW955713, AV727916, AW955616, AW951707, AV705433, AW954006,

					<p> AV708850, AW960276, AW959059, AV709232, AW958280, AW966031, AW957853, AW953868, AW952011, AV658299, AI525316, AV661286, AW959983, AW953763, AW955152, AV704798, AW958796, AV705319, AV707329, AW949779, AV690209, AV707196, AV726026, AW952328, AV725709, AW952583, AW951551, AW955710, AV703620, AW965530, AW959858, AV709786, AW967182, AW952579, AW963752, AV653846, AW959721, AV707171, AW964112, AW965730, AW962924, AW953575, AV709555, AW960299, AV727272, AW955088, AW967184, AW962934, AW958088, AW965839, AW960676, AV706655, AW954209, AW960579, AW954407, AW960587, AV656373, AW961228, AW956010, AV706407, AV702120, AW965759, AV652528, AW960201, AV727787, AV706925, AW951549, AV658784, AV726203, AW959366, AW955161, AV709025, AV708438, AW956762, AW949351, AV708007, AV726142, AW956138, AW951301, AV701657, AW954003, AV707422, AV729160, AW951750, AV727003, AV726619, AV705171, AV726755, AW963010, AW963641, AV727377, AW954427, AV728642, AV729557, AV702868, AV727526, AV725090, AV659389, AW954116, AW954238, AW950197, AV659294, AW960779, AW953499, AW958859, AV654287, AW951768, AV705665, AV705143, AV702574, AW954411, AV709587, AW959312, AW951184, AW957779, AW960049, AV702851, AW952192, AW963354, AV699089, AV660608, AV645504, AW954225, AW952329, AV655280, AV708320, AW954266, AI535639, AW951882, AV709314, AW950446, AV691080, AV687946, AV652001, AV728997, AV725745, AV684604, AW962980, AV728590, AV726737, AV704740, AV709660, AV701613, AW955707, AV701844, AW963643, AW958936, AV705538, AV706741, AW958529, U94592.1, Z30183.1, U45328.1, AB005666. 1. </p>
HLTFA64	315	638242	1 - 1116	15 - 1130	<p> AA703489, AW235215, W91995, AW361011, R99300, W91994, AA130677, H55848, T86395, AW051213, T86296, H55757, Z25051, AW579310, AC025754.4, AC016602. 6. </p>
HLTHG37	316	787530	1 - 3726	15 - 3740	<p> AL521709, AU139605, AU133158, AU139786, BE535428, AV715927, AV707854, BE882531, AI433464, BE302408, AW612477, BG122886, BE220521, BF593222, AI186034, AW189879, AA480343, BE002782, BF675617, AI082537, BE002805, AI745058, AI379721, AA001791, AW118778, AU149758, AA001870, AI190938, AA017469, AI810133, AI580107, BF061454, AA017470, N75111, AW573126, BG119005, AA496528, AI361074, AU143997, AI421480, AI797293, AU155671, AI039242, AA676895, AA035158, AA813771, AI380129, AA577557, AI625511, AU118630, AA034943, AA496455, AA035159, BE930108, H09058, R60578, D52456, AI199837, H71368, AA526250, H71321, H49158, AI801119, AW051381, AW193626, AI469299, Z44640, AU158178, AI375966, H03188, BE768068, ALS37252, AW027677, BE769432, H03987, AA189113, F07896, AA884440, AI247826, BF112089, BE768175, R44612, AI370691, R41912, BF908980, AW338918, AA300907, AL521710, AI682819, F05975, BF911500, AA089462, AI755046, H08357, C00830, AW137909, H49079, BF594512, AI219213, AI902677, AW837163, BF335290, AA629557, D20866, T84855, H01516, AU127032, N92073, AA034942, AA384103, AA386034, BF758104, AW820302, AI758883, AI032167, AA136525, BF239017, BE073835, AL121716.16, AL117443.1, AK023709.1, AK023685.1, AK001365.1, AF180371.1, AF102265.1, AK023432.1, AB032081.1, </p>

					BC001258.1, AL162056.1, AL050080.1, AB029040.1, AK027030.1, AK021676.1, U52077.1, AL050341.18, AC003977.1, AC006249.1, AL080315.18, AC022425.6, AL162711.17, AC012172.6, AL139188.14, AF104257.1, AC004385.1, AF314060.1, Z84470.1, AF205406.3, AC025898.9, AL139385. 12.
HLWAA17	317	629552	1 - 983	15 - 997	AL522002, BF305304, AL521608, BE732838, BE899550, BF344719, BG115015, BG109203, BF982386, BE410162, BE735023, BE901175, BG117962, BE281306, BG165427, BF793440, BE901577, BE872442, BF316646, BE409982, BF982251, BF970528, BE262711, BE299415, BF340859, BE386152, BF569778, BE281612, BF305644, BG251248, BF673757, BF183244, BE547252, AL521166, BF237978, BG249255, BE280374, BE301893, BG109330, BG164142, AL522550, BE018945, BG170896, AW732476, BE779176, BE018944, AL532064, AW250139, AA580387, H20615, BE741195, BE736037, BE72171, AI752100, BE870251, BE742694, BE883834, Z42865, W21970, AA873793, AW579408, BF753347, AA204913, AA206511, AA158660, BF971112, H66924, R25678, AA233944, BE743048, BE743976, BF304498, BE546682, BG112068, BF317329, BE278514, BF878947, BE744899, Z25248, BG248593, AW675147, T56764, AA368717, BE793472, AW956985, BE246887, BE298316, BE410692, BE707861, BF125052, BE388318, BF970723, BF675911, BE868990, BF031826, AA380216, AJ271671.1, BC007886.1, BC002563.1, AJ243649.1, BC003152.1, AF151829.1, AF132942.1, AJ243650.1, AC004832.3, AC005585. 1.
HLWAA88	318	588485	1 - 1756	15 - 1770	AI075040, AI566035, AI346970, AW453036, AU136077, AW572319, BE677521, AI971962, AI354722, AI611131, AI285086, AI017423, AW612105, AA719963, AI493120, AI910743, AI346087, AA860835, BG055741, AA995966, AW235992, AI188298, BF740313, AI205497, BG055743, AI949884, BF851530, AA939291, AA883259, AI985431, AA070019, AA613006, BE075994, AK023527. 1.
HLWAD77	319	653513	1 - 1153	15 - 1167	BG250493, BE786038, BF968793, AI148564, AV714668, AI911259, AV717040, BF031366, BF970799, W60958, BE221213, AV701362, AI683823, AW268612, AV711084, AW275920, BE551456, BE551386, BF244446, BE550880, BG110482, BF669035, AA404358, AW956755, BE669452, BE504275, BE674209, AV763474, AA443743, BF381847, AI271616, AA936391, AI675766, AV703458, AI695003, AA403095, BF968311, AI311856, AI082141, BF036575, BF575757, BE905833, AA503819, N30670, BF027805, T86418, AI079408, AA393808, AV711478, BE872085, AA393892, AA827290, AI189388, AA910984, R21152, H96780, AW804422, AI014740, AA804216, AV714823, AI219049, H23300, AI566294, R99539, BF724670, N75557, R99538, AI299755, AA476793, AA974212, AA417638, AI374805, AW952564, AV725011, AI094470, AI133161, BF221760, W05584, AI089034, AA905867, T86508, AA677753, R99550, BF753822, AA335337, AI240536, AA313386, AI538267, AA918453, BF811514, H23186, H92649, W87796, AW445161, Z40615, BE272827, T33983, AW298229, R08382, BF475310, R08329, H97711, H96103, H80948, T99199, N24555, AA375092, T99198, H92437, BE260997, AA383378, BE536680, AI085108, BF920784, AF132289.1, AF242523.1, AK024574.1, AF151859.1, AC004148.1, AC024082.6, AC009263.6, AA419545.

HLWAE11	320	783071	1 - 1604	15 - 1618	AI344312, AI276017, AI476822, AI139478, AI160906, AI240398, AW001088, AA425919, AA011278, AA428788, AI354692, AI089176, AA622689, BF431807, AI968918, N68826, AI467807, BF436247, AW673768, AW135943, R24434, R16812, R31419, R31434, R24435, H83155, AI865939, R31418, AW673133, W67349, R31433, AA027080, R28030, BE542160, T81223, AI631986, AA677315, BF760063, AI872675, BF331923, BE926682, BE926741, AF329842.1, Z82188. 2.
HLWAO22	321	587270	1 - 1324	15 - 1338	AL515814, AL515776, AL534165, AL520605, BF342613, AI064806, BF528629, BE856301, AI140344, AI763061, BF063934, BF244655, BF683133, AW340290, BF344711, AI659614, AL515777, BF034915, AI554886, AI086027, BE929854, AW193974, AL515815, AI255649, AA410368, AI937139, AA918821, AI218197, BF313091, AL525747, AA829365, AI336469, AW473975, AA577435, AV645326, AW070946, H22929, AA722774, AI610462, T90764, AA404313, AI623603, R54057, AV723824, AA404713, AW168607, AA079100, AV752738, BF316436, AW402756, AA912779, BE742923, AL534166, AA609213, BE350786, AA406191, AA923714, AW750290, AA325220, AW952354, BE898647, BF092248, AA293154, AI218895, AI198020, AI672973, BG002684, AA649195, W81523, H08723, AW207732, AA927962, AI873660, AA774521, BF880685, AL520606, BF837510, AW794716, BE044401, BF767735, AI383372, AI204653, AI361791, Z39695, BE673415, H70703, R54056, AI187740, H24109, AA079003, AI867628, AA330197, BF310103, BF854730, BE797091, BE737142, BF541812, AI689520, AW297870, BF965605, AW590611, H08439, BE263819, BF086702, F02166, BE547512, BF115405, AA477404, F04433, T83213, BF036962, BF767508, BE795356, AA430434, AW797192, AA479566, R16340, BF678079, BF685049, BF847264, BF847254, BF804160, BF847373, BE904852, R41416, BE312226, Z45578, BF733974, AA971991, W81639, AI902460, BF833057, BF804096, AI903581, BE798202, AA453110, Z42682, BF917644, AI564885, AA335484, AI811209, AW083638, BE260879, BF314999, BE274089, AI903535, AW376204, AI755186, AI880283, BE540568, AI523835, BG165048, AI627893, AW008226, AI440284, AI568293, AI559296, AI954721, AI446511, AI934011, AI364167, AI538564, AI744268, AI688858, AV750565, AI539800, AW129264, AI540179, AI364589, AI638644, AI690784, AI499570, AI590043, BE966550, AA659690, AI829432, AI932739, AI719817, AI500061, AI873604, AI479292, AI244360, AI141406, AI633125, AI620864, AI866040, AL515021, AI885982, AW081383, AI824746, AI620056, AI269469, AI270448, AI274655, AI884318, AI287252, AI678446, AI651840, AI890183, AI701097, AI635634, AI763414, AI370623, AI476478, AI266652, AI696714, AI799968, AI628325, AW236186, AI653402, BF035033, BE963355, AW151714, AI637584, AW055081, AV703776, AI866893, AA836665, AW152182, AK000833.1, AF226048.1, BC000659.1, AJ289857.1, AI110160.1, AJ297977.1, AJ289848.1, AJ289856.1, AJ289847.1, AJ289849.1, AJ289846.1, AJ289851.1, AJ289852.1, AJ289854.1, AJ289853.1, AJ289850.1, AJ289855.1, AK026408.1, AL117587.1, L25851.2, AL136850.1, BC004349.1, AL050149.1, AF183393.1, AL133619.1, AI162083.1, BC008591.1, AJ299431.1, BC009360.1, BC001785.1, L19437.2, AL080159.1, BC001711.1, AK000027.1, AL512684.1, X99971.1, AL133084.1, AB055331.1, BC001336.1, AL389935.1, BC004373.1, AL389982.1, AL133062.1, AK027209.1, AF115392.1, AL049959.1, AB056420.1, AL137530.1,

						AF122922.1, BC000732.1, BC005070.1, AK026462.1, AK000418.1, Y14314.1, AF124728.1, BC001199.1, AL050138.1, AF217973.1, AF131821.1, BC002849.1, BC006345.1, AK000484.1, BC008649.1, BC007641.1, AL157479.1, AK000414.1, AB060897.1, AL080154.1, AF353673.1, AK024974.1, BC007571.1, AK026182.1, BC005123.1, AK025658.1, BC001760.1, AL080148.1, AL133559.1, AB011076.1, BC007364.1, BC008063.1, AF267739.1, BC003101.1, AF218000.1, X99270.1, AL137682.1, AL138832.10, AP001601.1, AP001698.1, AB047878.1, AL137533.1, AF061795.1, AF151685.1, AL359583.1, AL137254.1, AC004805. 1.
HLWAY54	322	658702	1 - 1878	15 - 1892		AI024421, AA424694, AA824340, AA864327, AW592506, AA496077, AI125678, AI028208, AI126598, BF091360, AA406076, AA443593, BF376146, AA709069, AI131223, AI141116, AI333624, AI333870, AI769240, AI091519, AI147148, AI122673, AW948495, AA471063, H30251, R07741, AI138894, AA993247, BF376156, AA405433, H30315, AI382680, R07740, AA992230, AL042116, AB051833.1, AF085884. 1.
HLWBH18	323	104519 4	1 - 799	15 - 813		BG000096, AC023490.5, AC018636.4, AC006435.7, U95742.1, AL121891.22, AL451142.7, AL035659.22, AC020716.3, AL136179.15, AL450339.5, AC007216.2, AL136418.4, AL139054.1, AC011533.6, AC000159. 6.
HLWB163	324	566842	1 - 1024	15 - 1038		AI042019, BE858742, BE855466, BF476111, AI906495, AI908477, BE674293, AW274510, AI560883, AI989629, AW473428, AI680172, AI339026, AW612370, AI418979, AI275052, AA767349, AI890489, AW021884, AI969094, AW977119, H89111, N93142, AA885772, H10993, BE181184, AW368289, AI567013, AI868712, BF132001, Z40983, BE564470, H95610, R39509, BF695232, AW853314, W38986, H92044, AC008040. 7.
HLWBK05	325	765310	1 - 2369	15 - 2383		AI536643, AL514199, AI157671, BG260370, BE379053, BG252836, AL529147, AL515380, AL514200, BG104666, BG114729, AL529146, BF967759, BF527200, BF316407, BG261268, BF184232, BF115962, AW965314, AW005623, AW973905, BG171109, BE736594, BF529773, AI928466, AW516590, BF966979, BE046448, AW014546, BE876855, BG254307, AW958252, W87297, BF526617, AW959008, AA164613, BF439848, AW000936, AI703274, N24392, AI580919, AA037159, AI686912, AA179191, AW594515, AW085214, BE671804, AI168495, BE296633, AA868707, AA225014, AA888872, AI219983, AI179201, AI660755, AA164612, AI334991, AA420527, H97664, AW510978, AA988373, R70657, AA576605, AA437178, AA628293, H10567, N36611, BF966853, AA970653, AI806255, AA224953, BE296638, W39077, AW242291, AA594662, H99143, AW078769, AI679580, AI269095, N94194, AI680017, AA844022, H23755, BF966096, AA602349, BE164717, N99359, BE328493, W87353, R46707, AA889625, AA573514, R77834, BE090735, N25981, R51410, BF247470, R25551, AA398028, H80504, H48364, AA470783, AW207718, H06507, R64682, BE904435, AA426463, R12724, H06563, R64681, N63835, BF377563, R39776, R16671, BF966194, AA332170, AA378783, BF353343, AA609145, AA887867, H60238, H48275, AA360706, AI208801, BF884388, H11082, BF361356, AW238918, AI886136, R51298, R20363, N89819, H81420, N48366, AL527159, AV691174, BF361358, R40704, AW795836, AA704248, BF884528, T03502, C01112, BG055466, R41078, AA927831, AA988831, R75935,

HLWBY76	326	797609	1 - 2067	15 - 2081	R31994, AA420594, R43748, AA350100, AA639019, R16672, C14942, BF963256, AW947442, N71425, H60193, BE694187, BE694204, AA376032, BF358985, A1475079, R13270, A1872772, AW627454, BE841315, N55971, BF348486, AA938370, BE906485, N49143, BF370548, BE841319, AA169181, AA169309, BF204852, BE881724, AW051264, BE937060. AA923172, A1139607, A1269739, A1802946, N30680, A1277957, A1277237, BE715040, BE838082, BF354274, AW797336, AW797335, BF987948, AW873630, A1806044, AK026806.1, AC003991.1, AK027807. 1.
HLWCF05	327	460619	1 - 632	15 - 646	AW673972, AA524980, A1961840, AW515257, AA877458, A1336752, AW070880, N66443, AA528268, A1273991, N26777, AA004802, BF990906, AA700372, A1290414, AA906772, A1243008, H17960, AA502507, AA860313, AW470183, H84037, BF348530, R54094, BF764578, H84462, R30859, BF764695, A1864306, AW022917, AW970612, D45536, A1908718, BF878700, AW999226, BC003414.1, AL450487.17, AK025020. 1.
HLYAC95	328	778075	1 - 298	15 - 312	AV764526.
HLYAF80	329	460622	1 - 812	15 - 826	AA972709, BG111199, A1499555, A1872315, A1924051, A1494201, BF812963, A1804505, A1815239, A1500659, BE883591, A1866465, BG167830, A1815232, A1801325, A1866691, A1500523, BF812438, A1538850, BE885490, A1887775, A1582932, A1284517, A1923989, A1872423, A1590043, A1500706, A1491776, A1445237, A1926593, AW151138, BF811804, A1289791, A1521560, A1889189, A1500662, AW151974, A1285417, A1623302, AW172723, A1539800, A1284509, A1582912, A1538885, A1440263, A1889168, A1927233, AW058275, A1866573, A1633493, A1434256, A1431323, A1866469, A1805769, A1434242, A1888661, A1500714, A1284513, A1888118, A1285439, A1436429, A1859991, A1889147, A1355779, A1623736, AW194509, A1581033, A1371228, A1798359, A1590024, A1491710, A1431307, A1440252, A1687588, A1440238, A1047422, A1567971, A1866786, A1866003, A1610557, A1431316, A1242736, A1828574, A1539260, A1887499, AW151979, A1539781, A1431238, A1537677, A1702065, A1539707, A1885949, A1285419, A1559957, AW089557, A1521571, A1469775, A1866581, A1567953, AL047398, AW074057, A1815150, A1446495, A1889191, A1952433, A1867068, A1225248, A1358271, A1698352, A1282249, A1371229, A1440260, A1474699, BE612681, A1687607, A1932620, A1890907, BF811802, AW129310, AL515185, A1866458, A1432644, BF815930, A1273179, A1499478, A1371251, A1866510, AL134524, BE897632, A1866461, A1923046, AW151132, A1049859, A1539771, AL048403, A1955221, AA878808, AL119511, AL513655, BF814072, AW151136, AL043152, A1273116, BG252929, AW858243, A1371237, A1561170, A1554821, BE895765, A1690946, A1469764, A1358612, BE877142, AW191003, A1648567, A1433157, A1433155, BF814447, AW081103, BE909406, A1538883, BG029667, A1801286, AL048375, AW021373, BF527274, A1867066, BG113493, BG260144, A1362495, BG110517, BG168696, A1371243, A1500683, AV736134, AA857847, BF892773, AV736402, BE963035, A1635331, AV743129, BE896091, BG257535, BF911528, BG033906, AL039390, BF795712, A1493559, BF796402, A1049850, AL045626, AW858522, A1274759, A1355008, BF036448, A1433976, BG254745, BE875243, BF726204, BE779152, BG169065, AA437293, A1049851, A1440236, A1282247, A1249936, A1963849, BE537531, A1539863, A1582910,

	330	135220 3	1 - 756	15 - 770	AL040459, AI366900, AI537943, AI559976, BF814504, AW020095, AI366910, BG259737, AI521566, AA715307, AL513725, AI561177, AA809974, AW197139, BE618455, AL514283, AI250646, AL047611, BG113712, AI888022, AL512454.6, AL133391.5, AL138767.15, AL3555795.13, AP001835.4, AL355136. 19.
HLYAN59					AI761381, AI738617, AA777274, C02420.
HLYAP91	331	553514	1 - 1262	15 - 1276	AA464480, AI738416, AW970172, BF346852, BE004609, AI097351, AI051171, AW085704, N50904, AI950137, AI718945, H64092, BG236491, AI964070, AA514204, AW401489, W76242, H64144, AW204133, AA295625, AW388106, BF751672, AA693868.
HLYAZ61	332	135216 3	1 - 1223	15 - 1237	AV653286, AW591154, AV653266, AV757663, AF002986. 1.
HLYBD32	333	566657	1 - 1031	15 - 1045	AI290473, N36404, AI804254, AA321183, AA258620, AC073655. 26.
HLYES38	334	638042	1 - 1209	15 - 1223	AV701925, BE883545, BE250577, BE736918, BE616582, BF793477, AV706319, BF338817, BF346135, BE728115, BE615376, BG250960, BG032917, AU139668, BF951636, BF811794, BE899007, BE898175, BF217767, AL133895, AA225638, AU121535, BE531051, AU135520, AW899342, AA601152, BF675027, AA601227, BE154390, BF911201, BE385152, BF680445, BE264980, BE386373, AA715194, BF874267, BF871285, AA826146, AW023095, AW957880, AW957801, AW962273, AV732690, AA307661, BF882363, AW845664, AV749263, BF197329, AA779025, AA489803, AW872342, BF815608, AV748578, BF957961, AI380547, AA833581, AA243106, AW939910, BE304382, BF877837, BE141836, BF750972, AW962826, BF982391, AW938878, AU116940, BF203663, AA503299, AV652861, H02956, T57668, T47541, BF763870, AW865469, AV731015, BF207674, AI940701, BE184422, AA280232, BE792178, BF829537, BF767788, BF957954, AV683302, AV698434, AA258511, AI918674, AA121877, T07838, AA804919, AW515786, AA281292, AW865403, AU140348, BF238662, AA353112, BF732306, BF940980, T84195, AA431655, T06482, AI440300, H67786, AV715734, BE565499, AA630813, BF673583, AI761174, BF812273, AA593381, N62150, AA487808, W22010, AW898213, AW963317, AV653743, H67930, AI940708, AW864780, AA359714, AI052560, T07383, AW899527, AW999271, AW845678, AA649067, AW898920, AA356190, T97032, AA434462, AA221018, R01106, AA418919, AA431294, BF873657, AW630075, H73439, AA583363, T81895, T47477, BE177666, BE083070, BF951580, AW845665, AV729748, AA720812, AA577789, AA173218, BE968449, BF096068, BF869076, AW893125, H47099, AV730261, AW409222, AC005166.1, AL133514.7, AC005588.1, AL355143.17, AC004045.1, AL450333.13, AC008962.8, AC005768.17, AP002853.3, AC009466.17, AP000880.4, AL157688.4, AL121939.12, AC010369.6, AC004946.1, AL139327.18, AC011198.2, AL135780.11, AK022205.1, AC069304.7, AL109769.4, AL049781.5, AP001669.1, AL355520.8, AL133517.11, AC026398.4, AL353133.7, AL357153.4, AL049796.28, AF002997.2, AL356498.10, AL360020.15, AL121958.6, AP000826.4, AL590964.8, AL022399.2, AL121949.13, AC007065.5, AC023154.5, AL008722.16, Z82212.1, AL138965.10, AP001179.4, AL360272.23, AC006379.2, AC034215.4,

					AC020549.4, AL359973.11, AL357272.10, AL117191.6, AC012499.7, AL163052.4, AC010478.5, AC008488.7, AC004664.1, Z82203.1, AC012492.9, AL353573.10, AC023866.7, AC018659.35, AC007392.3, AL390035.10, AL353811.12, AL121980.14, AP001880.4, AP000629.4, AL357892.13, AL022401.1, AL137191.5, AC003013.1, AL136101.7, AC006399.6, AL355807.11, AL391475.7, AC003953.1, AC026773.4, AC026409.3, AC010289.7, AC002349.1, AL035422.12, AC011359.5, AC018705.10, AL050401.5, AC007250.2, AL022101.1, AL358337.1, AL353788.33, AL008713.1, AC006395.1, AC090645.1, AL358335.4, AL008633.1, AC020977.5, AL121947.14, AC016591.6, AC090497.2, AC083862.2, AL136110.17, AC010969.11, AC006313.1, AL035397.4, AL160236.4, AL389888.8, AL590675.3, AC013242.7, AC024610.6, AC010749.3, AC009404.5, AC007248.3, AC009901.6, AL365179.30, AL158033.18, AL031671.12, AC006061.1, AC007032.2, AC067744.5, AP001972.4, Z78022.1, AL121694.4, AB017651.1, AL109662.3, AL035427.17, AL109845.8, AL079333.7, AL133348.8, AC010209.13, AL359914.14, AL049821.6, AL139396.17, AC019097.5, AL117327.5, AC022413.4, AC004006.1, AL162587.20, AL356789.16, AL022097.1, AC073325.8, AF003529.1, U82696.1, AC007489.3, AC009039.6, AL163281.2, AC069543.4, AF274856.2, AL359012.7, AP001573.3, AC025471.5, Z70233.1, AC004979.1, AC023347.8, AC021133.5, AL590363.6, AL133386.3, AL160471.5, AC020987.8, Z95325.2, AC069298.8, AL157791.4, AC004535.1, AL355540.12, AC009122.8, AC012450.9, AC026445.4, AC008860.6, AC016612.5, AL080316.8, AC002407.1, AC011745.4, AC007376.9, AC005029.1, AK022413.1, AC090004.1, AC069462.2, Z85997.1, AL590043.7, AF128525.2, AC007256.5, AC025040.7, AL078600.15, AL500522.9, AF064865.1, AF235098.1, AC002086.1, AC079316.15, AC034305.6, AC020896.5, AC008886.5, AC008834.6, AP002088.2, AL159970.16, AL157911.4, AC002458.1, AL590034.10, AC073387.4, AC007743.3, AC005510.3, AC005016.1, AC078848.3, AC022710.10, AC022073.13, AL356956.11, AL160052.21, AL137013.4, AC004050.1, AC005272.1, AC005826.1, AL158147.17, AC008173.2, AL034399.6, AL158823.11, Z99570.1, AL121577.1, AC021237.5, AC021001.5, AL138920.11, AC069294.5, AF280107.1, AF117829.1, AL109921.21, AP000457.3, AL033375.2, AC008071.2, Z71187.1, AP002076.3, AL139106.12, AC004083.1, AL357312.8, AL162571.9, AL162373.16, AL133339.13, AL161450.14, AC005187.1, AL356473.11, AL353691.12, AC007000.2, AC018741.3, AC013429.12, AC008265.15, AC044791.6, AC068712.6, AC016617.5, AC004845.2, AC012152.12, AL445669.9, AL163248.2, AF207955.1, AC004668.1, AF109076.1, AC013562.6, AL139231. 13.
HMADS41	335	596831	1 - 1253	15 - 1267	BE740695, BE739906, BE899124, BE742745, BF685920, BF971897, BF684948, BE336652, BE747520, BE925550, AI733012, AI492192, BE207602, AW275042, AA954656, AW139807, AI791409, AW136444, AI361524, BE207644, AI762361, AI762373, BF684146, AA306161, BF062047, BF222947, AW003832, BG028044, AA865078, AA402599, N32269, BC007725.1, AF123757.1, AF123758.1, AF123759.1, AF123760.1, AF123761. 1.
HMADU73	336	135217 7	1 - 3180	15 - 3194	BE736177, BF968408, AW953455, BE513085, BE898654, BG248447, BE910370, BE311470, BE905308, BG163998, BE744228, BG167712, BG167766, BF219830, BG181007, AI141537,

					AW410963, BF183034, BE273660, AW150338, BE876928, BF205734, BG025353, BF220216, BE906937, BG024133, AW410964, BE784095, BE894840, BE787695, AI937321, AI291285, AA604680, BG035017, AI676225, AI416979, AA910937, BE273358, AI249741, AI126639, BE613036, AI601165, AA427563, AW068179, BF870292, AW997226, AI583536, AA039978, AA922852, AI042545, AI609947, AI870329, BE503809, BE244069, AI582686, BF334791, AI581661, AI268853, AA147194, AI335735, BE208847, AW190590, AI128471, AA536207, AI885712, AI419345, BE073411, AI246422, AI291867, AI917249, AW886428, BF436597, AW874025, BE247396, BF334812, BF334774, BF129143, AW303929, AI991848, BF334775, BE245324, AI423211, BF334783, AI031988, AA293156, AI972206, AA437330, AA076636, BF081258, AA427681, R73436, AI610274, AA102470, N47449, BF334781, AA427536, BF334779, N93816, AI951382, N47448, AI284267, BF968513, BF334797, BF334790, BF334816, BE789673, BF334813, BF334801, BF334776, AI349335, BF056321, BF334805, AI739283, AA627054, BF814698, AI338846, AW408759, BG034764, AA502274, BE890383, T08688, BE709083, AA659199, AA872138, AW191035, M62233, AI242832, AA040020, BF334773, BF844001, F24622, AI859689, AW191950, R73435, BF843212, AI215685, AA824249, N24016, BF733515, AW302387, AI766197, R85996, AW051539, AA766282, AI610976, AA477903, AA991453, AW068089, AA834378, W44967, AA488037, AI571263, BF436901, AA477255, AA732344, BF334770, AA962838, BF334769, AW471108, AW205834, AA456125, AA456126, AI311739, AA501748, R74553, AW966388, T08687, R72613, BF347017, AA284901, AW000739, AW131887, AA627957, AW001111, AI225064, AA284724, AA454679, BE300238, H42416, AI087082, AA235858, BF334795, AA487922, AW078845, R74250, AA625704, R72682, AA399145, R82789, AA394142, AA469296, T34972, AI261404, W90123, AI445249, AA368361, BF222642, BF905696, BE001794, AA469376, AI520758, R64060, AA431718, AI829844, BG056583, BF334780, BE714858, T49386, AI469479, AA293648, AW192996, AI393983, BF334802, AI751338, AA102469, AL044292, AI382272, AA889433, AA295640, C01822, BF813657, BE242937, AI601166, AW956705, BE245918, AI343287, AI762717, BG015518, AI581968, T30468, RI5816, BG058427, BE814656, AI744412, BE786532, C18456, BE672796, AI476060, AW068319, BG236882, AA112206, AW009377, AI424337, AI824385, BE729392, BF334806, BF334785, T32462, BE696554, AW361898, BC000424.1, AF131760.1, AL080164.1, AL133448.4, AF177336.1, AL110149. 1.
HMAMI15	337	135240 6	1 - 1244	15 - 1258	BE790239, AI114496, BE047613, AI609021, AI478544, AI949665, R96283, AI205799, W39248, AI670908, T70976, AA070919, AI243978, AW854183, AI796472, BF883407, AW975683, AA654405, AI125888, AA730911, AA545731, BE222003, AA730927, C21177, AA721678, AI478489, AL137139.9, AL139035. 27.
HMDAE65	338	520338	1 - 684	15 - 698	AL035447.6.
HMDAM24	339	514394	1 - 982	15 - 996	BF741516, BF740289, BF740290, BF741538, BF760315, BF911969, BF830586, BF759998, BE083615, BF932902, BF763222, BE079695, AC004797.1, AB023141. 1.
HMDAQ29	340	600406	1 - 960	15 - 974	BF828645, AC007404.4, AP001064.1, AL158172.5, AL096700.14, AP001754.1, AC011446.6, AC021325.5, AC016968.24, AL008719.1, AL031729.16, AC008011.1, AC074295.7, AL157823. 9.

HMEAI48	341	135229 0	1 - 399	15 - 413	AA297104, AA298556, AA216561, AW957476, AL532709, AU124631, AA173361, AA206770, RI4826, AL513976, BF726195, BF901681, AA873180, W20303, AF109127.1, AF109126. 1.
HMECK83	342	636035	1 - 996	15 - 1010	AW070189, AA680237, AA577812, AI732177, AA835854, BG223537, AL023494.12, AL158196.24, AC009102.9, AE006466.1, AL163248.2, AC003957.1, AC008537.5, AC022161.7, AL357315. 14.
HMEET96	343	566720	1 - 1323	15 - 1337	AL521371, BF337502, BG249151, BG113640, BG260630, AL521372, AL516032, AV731587, BE384522, BE973743, AI735261, BE563906, BE277846, AI808277, BF667795, BF691333, AW958349, BE871082, BF791366, BE389571, AW674769, BF691310, BF743166, BF211360, AI368797, BF572289, AA583057, BF664548, BE567499, AA807741, AI828551, W02860, AI088857, N44490, AW439214, AI026716, N73457, AI142511, N34764, AA633495, BF346426, AA594963, BG258660, AA862351, AI356184, AW518053, H98681, AI125040, AI306645, AW675383, AI280832, AV729211, AA748024, AI707840, AA830528, AA916426, AI285008, BF743169, AV724056, BE531141, H04537, T71560, T87237, BE855394, H29267, T71330, AW078897, AA507967, BF790198, AA613581, AA215785, H09795, AL516031, BE763380, T71482, AI261966, AI783537, AW853901, T79791, AW853890, AA459511, T97835, D60812, AV711819, H04458, N27248, AA483615, BE615442, AI685127, BE616237, F10230, BF239991, BE614864, BF965165, AI471017, T79360, C00631, AI523786, BE833176, AI587003, AW051263, AA588437, AW364142, T10196, AA379077, H57434, AI469848, AA156281, R41344, BE077173, BF239125, H94779, BE093345, AW168908, BF541751, T74091, H09880, H29351, BE833069, T82010, AA082465, AW951663, AI919531, F12612, AA452714, AW068971, BE697991, AA450068, AW024907.
HMIAL37	344	603201	1 - 1406	15 - 1420	AW934844, AL045824, AI269960, AW300030, AA860926, AI761354, AI739238, AW351654, AI984995, AW390711, BF931410, BE464037, BF229829, BE764327, AI628985, AI989344, AW013904, AI869919, AA121174, AI453367, AI270726, AI272081, AI869907, W22160, AW192301, BE463416, AI991419, AI796741, AA551799, AI738967, AI738958, AI783811, AW304132, AA344913, BF229794, BF798430, AW843500, AW888833, BF798442, BE763828, BF761128, AA121198, BF333846, BF928080, AW062449, AA327309, BF800375, BF800393, AW845326, BF808207, BF819298, AB018687.1, AB006955.1, AF039700.1, AF039699.1, AC005137. 1.
HMIAP86	345	726831	1 - 1660	15 - 1674	AL533220, BF967956, AL533253, AL520510, BE735407, BF972030, BE735149, BE615619, BE616472, AI873527, BF347687, BE383692, BF967233, BE385645, AW593348, AW381588, BF541528, AI032869, BE294015, AA404241, AI564151, BE294088, AA401224, AI682367, BF694848, BE255192, AA910774, AI367739, AW976142, BE615232, BE389860, BF029472, BE615138, BE645680, AI131262, AA054608, AI479085, BE728074, BF672705, AI241428, AA021119, AA142931, BG108596, AI039086, BF348256, AV748480, AA021118, AA056945, N48177, AI202193, AI491859, N53324, AI364707, R44688, AA015735, AW015622, AA905989, AA813639, AA057005, AA035652, AA917010, AI952221, AA054548, AA015832, AA505774, AI697106, R19440, BE707409, BF841914, BE677828, AW954134, AW950006, AW954211, AI968179, AW960629, AW964070, AV728721, AV656478, AW953797, AV696931, AV683994, AV703878, AV702019, AV705014, AV728733, AV727510, AV706741, AV726026, AW952460, AV709596, AV709273, AV725633,

					<p>AV706417, AW950443, AW959983, AW960655, AW960601, AW952403, AV702164, AV661704, AW952751, AW956075, AV645936, AV709587, AW955723, AV658084, AV692600, AV650315, AV659389, AV697880, AV727613, AV656373, AV726010, AV726091, AV660258, AV708109, AV647789, AW959521, AW956474, AV727787, AV659294, AV703146, AV726789, AV680600, AV692345, AV725745, AV660608, AV728148, AV726156, AV726590, AV709314, AV703790, AV653353, AV654070, AW964585, AV691080, AW951281, AV702385, AW949802, AV658275, AV652001, AW955662, AV707979, AV703669, AV727003, AV709580, AV725208, AV658751, AV725582, AV708786, AV659547, AV727526, AV651920, AV725618, AW954439, AV684762, AV650283, AV702266, AV707088, AW963768, AV725776, AV650591, AV725577, AV725033, AV706223, AV728924, AV725617, AW954206, AW955900, AV707863, AV725991, AV650691, AV707304, AW952410, AV703062, AV726619, AV727822, AW951536, AV650768, AV699089, AV705135, AV701874, AW964410, AW962444, AV703501, AV661286, AV702772, AW962978, AW964440, AV702137, AW954237, AV707401, AV701183, AW955696, AV709660, AV704585, AV654035, AV709935, AV707652, AV707663, AV707654, AV704042, AV654282, AV709880, AV729220, AV697288, AV698290, AV694836, AV706882, AV704847, AV697498, AV702954, AV686420, AV727238, AV682997, AV696866, AV727126, AV707656, AV655890, AV701946, AV728997, AV706162, AV686390, AV705635, AV702794, AV686417, AV656256, AV695700, AV686083, AV698429, AV656240, AV655577, AV692972, AV694871, AV704217, AV727459, AV655901, AV689410, AV702790, AV705246, AV695545, AV687946, AV704924, AV728546, AV703762, AV706734, AV702854, AF078544.1, AF155811.1, AF155809.1, AF155810.1, AL035423.4, AJ010966.1, U94592.1, Z30183.1, AF217994.1, Y08991.1, U45328.1.</p> <p>BE043082, AI927692, AW058564, AW055230, AW015122, BF592005, BF196476, AA814450, AI634533, AI139038, BF446797, AI277016, BE045365, AA732327, AI435146, AA290626, AA832487, AW964897, AV682305, W56110, AI796930, AI949631, R48833, AI800208, AI628443, BF431339, BF371245, AI935532, AI582596, AA319436, AA832489, T59460, AA806730, AA279760, AA325502, AI935529, C20681, T59406, AA766259, BF089238, AL035209.1.</p> <p>AA736481, AI288032, AC004587.1, AC004031.1, AC002073.1, AC009137.6, AF001550.1, AL109628.5, AL121594.6, AL133215.16, AC024584.5, AC007688.15, AC005874.3, AF134471.1, AC002565.1, AC004678.1, AC003950.1, AC007546.5, AC002395.1, AC011529.3, AP002906.2, Z83826.12, AC009470.4, AC004703.1, AL050335.32, AL117354.12, AL136418.4, AL139054.1, AC005914.1, AL022313.1, AC002044.1, AC020633.3, AC018758.2, AC007279.4, AC013734.4, AC019205.4, AC005844.7, AL033519.42, AL035460.15, AC011484.4, AC020916.7, AF176815.1, AC007390.3, AC007371.16, AC009488.5, AL162615.13, AC006263.1, AC005156.1, U78027.1, AL031681.16, AC011491.5, AL136219.17, AC004383.1, AC002978.1, AC027319.5, AC018648.5, AC012476.8, AC055120.5, AL035422.12, AF031078.1, AL136218.26, AC008521.5, AC083871.2, AC074121.16, AL356915.19.</p>
HMKCG09	346	548078	1 - 907	15 - 921	
HMMAH60	347	562776	1 - 808	15 - 822	
HMQDF12	348	566844	1 - 692	15 - 706	

					AA159477, BE292792, AI674909, AW572265, AI923587, AA636061, AW089967, AI457146, AI866782, AI888802, AI186201, BF739152, AI932621, AI379539, BE531047, BF689168, AI262916, AA934750, W60466, AI318103, AA588706, AI354896, AV656354, AW601821, BE744973, AW188567, AW970628, AW188566, AW079392, AA252902, AI472809, AW994447, BE042388, AI368181, AI625947, AA552111, T97710, AA502830, BG259849, AW751488, BF737129, BG222333, BF737107, BG222571, BF916953, BE736954, AW117966, BE871206, AA715308, BE838489, BF835784, BF764625, AW291547, AW087246, AI682601, BF737124, AW074322, BE899333, AI824247, BF914747, BF836557, AI620321, BE672984, BF812178, BF772249, AW389752, BE827597, AW376365, AW362652, AA253308, AW794420, BF882777, U42408.1, U58994. 1.
HMSBX80	349	597448	1 - 1712	15 - 1726	AI400709, BE166317, AA635412, AA640681, BF822142, AW974947, AI919122, AW082490, AI469586, AL049715.25, AL445222.9, AC011495.6, AL137852.15, AC022217.5, AC011247.10, AC005077.5, AL096814.26, AL391139.19, AL358976.11, AC009123.6, U91323.1, AC009498.3, AC005255.1, AC003037.1, AC074121.16, AL358777.12, AC006509.15, AC005522.2, AF001549.1, AC007240.2, AL031727.42, AC022425.6, AL049569.13, AC011470.5, AC005015.2, AC022027.5, AC005377.2, AP003473.2, AC011815.7, AC008169.2, AL118520.26, AC008267.6, AP001922.4, AC084864.2, AC002476.1, Z85987.13, AL109976.23, AC010271.6, AC010609.6, AC008569.6, AP001718.1, AC004963.2, AL035088.1, AC090426.1, AC006270.1, AC006449.19, AP001711.1, AL009179.1, AC011465.4, AC020908.6, AC005072.2, AP000251.1, AC005071. 2.
HMSFS21	350	545427	1 - 1269	15 - 1283	BF764928, AW959372, AW951170.
HMSGGB14	351	570833	1 - 1538	15 - 1552	BF355584, BF355571, BE160727, AL041690, AW502975, AV761155, AA587604, BF965007, BF475381, AW673241, AA631507, AW338086, BG222267, AI371070, AW406755, BF681427, AA652764, AI434695, AV728425, AV760777, AW969629, AI921476, AL042420, AW276435, BF919090, BF918590, AI246119, AI473943, AA503473, AI499938, AW965008, AI358229, AW503900, AA594145, AW162049, AW407578, AW995093, AI929531, AW008317, AV759204, AW936851, AV725423, AW021583, AL119984, BG171096, AA503258, AI357288, AI623898, AI830390, AV762645, AV725431, AI564454, AI623720, BE393367, BG178002, AV703682, AA502155, AW872676, AW103981, AA226153, AP001721.1, AP000125.1, AP000057.1, AP000172.1, AP000331.1, X90978.1, AP000330.1, AL139415.10, AC004067.1, AC019097.5, AC083884.6, AC011464.5, AL352978.6, Z84480.1, AC021016.4, AC024163.2, AC010553.6, U18395.1, AC005098.2, AL133382.8, AC009497.3, AC007003.4, AP001670.1, AL122001.32, M37551.1, AC022202.12, AC004816.1, AL136969.7, Z22650.1, AC009120.8, U57007.1, AL356481.16, AC006130.1, AC008171.3, AL157372.18, AC016903.3, AL035684.25, AJ009611.6, AC020928.6, AL450224.1, AL360230.20, AL445201.14, AC007240.2, AL023882.4, AL450226.1, AL049776.3, AC004694.1, AC004169.3, AC011455.6, AL031311.1, AC004031.1, AC006211.1, AP000432.4, AL160155.19, AC022493.12, AC004859.2, AC010329.3, AL109797.18, AC025264.16, AL353807.18, AC018495.4, AL356473.11, AC020663.1, AC004953.1, U47924.1, AC022405.5, AC004019.20, AC000052.16, AC011286.7, AC005245.1, AL137802.7, AL034379.8, AC010530.7, AC004638.1, AL109805.14,

					AL049830.3, AC009996.7, U62631.1, AL355497.14, AL121591.3, AL450265.11, AC010643.5, U66059.1, AC008102.17, AL390738.4, U91323.1, AC004206.1, AC026225.4, AC004650.1, AL158064.16, AL162426.20, AC005775.1, AE006467.1, AL121594.6, AC006205.7, AC006305.2, AC027239.5, AL357569.12, AJ006345.1, AP000514.1, AL357752.19, AL162233.14, U75931.1, AC090051.8, Z69666.1, AL022311.5, AC005523.1, AP001760.1, AC011479.6, AC005694.3, AB014080.1, AC010145.9, AC009358.6, AL161788.13, AP000044.1, AP000112.1, Z97200.1, AC026391.6, AC002476.1, AC007358.2, U12584.1, AC008720.6, AC000118.1, AL121903.13, AP000795.4, AC007050.25, AL133355.12, AC009228.4, AC006277.1, AC005740.1, AL163282.2, AC04797.5, AC007622.28, AC079177.21, AE006465.1, AC006275.1, AL589782.7, AK024174.1, AL390755.5, AC008760.6, AL158830.17, AC005527.3, AC010677.4, AC004987.2, AC009950.6, AL163973.1, AC007022.2, AC005079.6, AP001631.1, AC010150.3, AC007377.3, Y14768.1, AL158194.16, AC008745.6, AC008806.4, AL096792.5, AC006251.3, AP001716.1, AC005324.1, AC008519.4, AC005531.1, AL121964.16, AC006167.1, AC084865.2, AC004455.1, AL590682.9, AC006372.2, AL355385.15, AC090883.1, AC068466.4, AL121983.13, AC007298.17, AL162729.8, AL121886.22, AC010342.5, AL357518.15, AL353764.9, AP001748.1, AC009477.4, AC008848.7, AC007488.15, AL391868.15, Z71187.1, AL354720.14, AC027332.4, AC009412.6, AC007099.3, AL161656.20, AL139809.16, AL031276.1, AC004485.1, AL031281.6, AC005295.1, AL590762.1, AL022328.21, AC013414. 7.
HMSGT42	352	383470	1 - 1549	15 - 1563	AL533548, BG254144, BE887099, BE887081, BE878731, BG116125, BG025945, AW957637, BE612783, AV714585, BG107890, BE781717, BG030517, AV718270, BE888408, BF665580, BE880927, AV710046, BF666320, BF030581, C75683, BG029271, BE880632, BE887874, AV733955, BE695911, BF668753, BF666696, BF978924, AV757896, BE568697, BE932552, W55909, AV651776, AV714563, BF700463, AI377408, BF669293, AI857934, BF669212, BF213025, BE545003, BF691021, AW024331, AA725652, BF185721, AI829947, AA454213, BF680798, BF964977, BE904360, BF701393, BF241919, BE789978, BE932459, BF665354, AA314273, BF037589, AW351912, BF028073, AI309773, BE932553, BF701113, BE932539, BE816887, BF665260, BE932447, BF692251, BF184304, AV701697, AV707435, AW270018, BF697317, BF244581, BF029708, BF129991, BF185277, AA861381, AA001402, BF131429, BF670186, AA305370, BF696039, BF211541, BF690925, AA447415, BF214411, BE932475, BF572141, BE932540, BF724466, BF667996, AI857939, BE644614, BF968128, AA629424, BF700100, BE958024, BE646415, AI857941, BE968671, AA306430, BF692658, BE779388, AA858363, BF667913, BF242902, BE932484, BF700414, AV655721, BF695497, AA454212, BE932439, BF132852, BF031185, BF028474, AI589640, BF245173, AA521350, AW752399, AA447414, BF244157, BF381984, BE568476, W55910, BF195161, BE504467, BF185628, BF213439, AA809077, BE960947, BF104162, BE816941, BF031301, AW298803, BG260202, AI475816, AV700780, AW630212, BE569124, BF668875, BF541632, BE865509, BF699689, BF665760, N93336, BE898217, BE568064, BF372428, BF674472, BF664872, AI540152, BF693954, BF571750, BF792635, AA703503, BF307415, BF242078, AA629906,

					BF184679, BF243347, AW778874, AA523671, AA181455, AA431132, AI560791, BE958209, AA315633, HI8045, AV755841, BF030440, BF131135, BG249184, BF670667, AA186625, AA861405, AA663419, AW996056, BE567887, BE865807, AA531308, AI139080, AA843632, W95504, R80694, BF664562, BF977109, AI291233, AI745163, H98623, C75579, BF666247, AW971769, AI274327, BE565642, AI218737, N93386, BF240785, AA204997, AI291765, W39740, BF757214, AV714850, AI027269, W44792, AA192752, AA772002, BF215015, BG058583, AI807027, AA493379, BE168171, AI285081, AA918748, AA459602, AV682318, W95451, W80402, AI085784, BF106436, AV681563, BE168154, AW604348, W32254, AA311342, AI346231, AI086810, AI348232, BF437332, AI304545, W79010, AW058049, AA157979, AI565637, BF215257, AA205366, AI302529, AW085164, AA432149, H99232, BF690888, AI358223, BE168394, BE932473, W15312, BG165346, BE835844, AA744881, BE814385, BF131056, AF288991.1, BC005294.1, AF051894.1, ALJ21989.12, AF288992.1, AF267986.1, AL132640.4, AL049779.6, AF267983.1, Z62873.1, AF267982.1, Z62874.1, AF267984.1, AF267985.1, T54811, T55185, R24125, R27504, R64164, R64278, R76615, R77750, R78101, R80695, H00161, H00199, H01506, H01612, H03815, H11302, H11303, H18029, H18238, H18276, H21844, H21845, H22737, H24019, H40729, H40861, H41003, H39213, H43589, H43591, R93867, H50227, H50262, N25143, N26355, N93005, N93049, W20245, W21356, W21385, W25189, W25405, W44746, W44715, W93846, W93867, W95402, W95407, AA001470, N91043, AA026860, AA026861, AA057539, AA057538, AA088796, AA179997, AA192828.
HMSHM14	353	461897	1 - 742	15 - 756	AW817008, AW817118, AW951170, AL078634. 24.
HMSHS36	354	112769 I	1 - 1388	15 - 1402	AV701925, BF793477, AV652861, AV706319, BF733347, AV731015, AA649067, BF217767, AU116940, BG032917, BF811794, BF982391, AU120741, AI133602, BF871285, BF673583, BE620216, AI132952, BE250577, BE797641, AV652798, BF874267, BE883545, BF951636, BF877837, AL133895, BE898175, AU120778, AA577789, AW893125, AW962273, AA720812, AA225638, BE736918, BE153395, AA583363, AI926740, AA601152, BE563291, AA180390, AW845697, AW023095, BG009679, AW962826, BF871283, BF732306, BE616582, AA456928, BF803637, BE385152, AA553442, AA604116, AA503299, BE728115, BF763241, AA584599, AI568660, BF918672, AA808950, N62150, AI761174, AU147985, BF943073, AA418822, BE646483, AW845701, AA081957, AI084217, AI832080, BE379426, AA584606, BE615376, AA593381, AW593396, AA630813, N23657, AA487214, AA601086, AA309271, AA179694, BF755046, AA524729, AA631405, AV730261, AA703315, BE154390, AI052560, BF883829, N23646, AA826146, AA713998, AI940701, BF815608, AA584589, BE790104, AW087334, AA487598, AW939910, AI493725, AA418919, AA779025, BF338817, AI686420, BF001825, BF063736, AA663257, AW872342, BF929662, BF919126, BF919125, AI002286, AI940708, AW845664, AU156101, AI800842, AU148272, AA669412, BE676217, AA584914, AI564481, AA593077, H71269, AW088584, AI479770, BE167158, T07383, AU140348, BF958620, T57745, T57474, T63786, BE141836, AL134317, AI671215, AA910874, AW439349, AA171526, AI968135, BF871286, AA774178, AA353087, AA281350, BE531051, AI858454, H63688, AA076475, AW993580, AW865469,

AA280232, AU139668, BF997714, BG012085, AI248986, AW819076, BF218444, AW190986, AW238615, AA084198, H71280, AA258511, H92806, BF767788, BF763870, BF878613, BF905882, BF969711, BE783575, AL048837, H59185, AA632760, AA076364, AA281143, AA227286, AA587277, AI795961, AA481809, AA434462, BF812273, AW513636, AV653743, BE897813, AA581506, AI081365, AA180023, BE177666, BF869076, AA969742, AA188746, AW845678, BF878615, AA218640, AW088010, AA354211, AV652938, BE072874, AA583368, BF829537, AI654594, AW865403, N70045, AA487808, AA431655, AA486234, AA664413, AI114647, AP002532.1, AL121986.12, AB045358.1, AL450382.6, AL121879.14, AC073311.7, AC004389.1, AL035397.4, AL355379.5, AC022416.5, AC079147.5, AL133226.16, AC006154.1, AL355796.11, AC018795.9, AC005521.1, AL354926.16, AL133282.15, AC004049.1, AC078950.19, AC012492.9, AL096862.18, AL354941.10, AL353811.12, AL121964.16, AC007882.3, AC026756.15, AL359925.9, AC007001.2, AC007967.3, AC006999.2, AC006386.4, AC010080.2, AL512374.1, AL357394.11, AL022160.1, AP001712.1, AP000466.1, AC078927.20, AC010146.13, AL137191.5, AL133553.9, AC004932.4, AC018741.3, AC068712.6, AC044791.6, AC005029.1, AC002349.1, AC007000.2, AL133229.40, AC009478.4, AL391987.15, AL135903.12, AC006210.2, AC007388.3, AJ400877.1, AL109662.3, AC002086.1, AP001208.3, AC012323.7, AC010681.15, AL139277.7, AC020910.5, AC019097.5, AC010209.13, AC025471.5, AP001207.3, AC016057.5, AC083875.1, AL356214.20, AC009299.5, AL359316.6, AL109845.8, AL353573.10, AC004979.1, AL035551.6, AL359237.4, AC016748.3, AC010289.7, AL163248.2, AF207955.1, AL162390.9, AC018705.10, AL035427.17, AL139141.22, AC048346.13, AF235098.1, AL163206.2, AF198099.1, U82696.1, AF274856.2, AC078955.24, AC022073.13, AL008633.1, AL590675.3, AL121780.11, AL356115.9, Z95333.1, AC006477.3, AL500522.9, AL365222.24, AL031622.1, AL138743.5, AC007035.3, AL162580.20, AC007759.1, AC025265.21, AL138920.11, AC003098.1, AL353691.12, AC012152.12, AL133411.8, AC010623.7, AC008430.3, AC090645.1, AC018833.3, AC026214.3, AC087092.1, AL359914.14, AC004208.1, AC022710.10, AP001669.1, AP000457.3, AE006462.1, Z84812.1, AC010528.8, AL078600.15, AC003658.1, AF196972.1, AC005875.2, AC026182.4, AC087086.1, Z82975.1, AC007250.2, AC068812.13, AL162464.5, AL035258.10, AL132987.4, AL390061.9, AC003013.1, AL136101.7, AL080316.8, AF117829.1, AB014082.1, AP000515.1, AC016617.5, AC007743.3, AL158823.11, AL356804.4, AC006979.2, Z99570.1, AL355540.12, AC002479.1, AC010629.6, AC011359.5, AC090497.2, AL139231.13, AL590043.7, U73465.1, AL359012.7, AF003529.1, AC005023.1, AL391358.14, AP001634.1, AC083870.2, AL356956.11, AL034410.8, AC023154.5, AL022401.1, AP001429.2, D83253.1, AL158819.14, AC079316.15, AL132825.35, AF216667.3, AF257497.3, AL161871.6, AC007444.1, AL160471.5, AL030995.1, AC069543.4, AL590034.10, AP000924.6, AP002788.3, AP002076.3, AL157815.12, AC005491.1, AL162388.8, AC008973.5, AL157791.4, AC008860.6, AC016612.5, AC079824.25, AC009196.13, AL133249.1, AC016716.6, AF128525.2, AC026116.26, AL050401.5, AC026445.4, AC009480.4, AC008407.4, AC090043.1, AL160234.2, AL137226.3, AL139165.1, AL158841.6, AC063979.4, AL354913.11, AC010523.6,				
---	--	--	--	--

HMSJM65	355	633637	1 - 2256	15 - 2270	AC007788.1, AC007065.5, AP001964.2, AL133480.9, AC006399.6, AL136110.17, AC025457.5, AL353643.10, AC012089.13, AC006565.4, AL0222399.2, AC016689.3, AL034428.4, AC018712.5, AL033375.2, AL499610.10, AL121694.4, AL360272.23, AL356317.8, AL136309.8, AC079034.34, Z82203.1, AL049734.11, AC010368.4, AC022740.4, AC025447.4, AL136297.3, AL138479.4, AC004551.1, Z94056.1, AC008154.6, AC087879.8, AL137795.10, AC010201.18, AC018787.5, AC007256.5, AC008488.7, AL117339.10, AC008071.2, AL389895. 3.
					BG11486, BE735498, BF668117, AW961166, AW451452, BE868441, AI040326, BF438495, AI650832, AW959882, BE857559, BF438494, BE19035, BF668359, BF697908, BE958065, AA313243, AI650393, AI818259, AA534633, AI033652, AI094737, AI693411, AI341518, W30723, AW197245, BE170654, AW051598, BE958204, AW938820, AW291994, AI274289, BE814871, AI221551, BE551765, AA035621, BG007999, AA653321, AA781232, AA634950, AA136077, N99062, BF431729, AW961161, BE669925, AW844472, BF668283, AA136161, AA722867, AA932876, AI659053, AA806117, AI474321, H87560, AA843369, AI435016, BE172432, H21542, AA361623, N47604, N45494, AI907694, AA332538, H87452, AA037342, AI284255, AA365059, AW797627, AW797609, BE074558, AW797590, BF827909, AW581248.
HMSJU68	356	427121	1 - 1109	15 - 1123	AV742802, AV736824, AV762141, AV753828, AV762045, BF916188, AV760835, BG222151, BG223218, BF061262, BF941567, AA828594, AW516505, BE676909, AA577958, BF060915, BG222210, AW873282, AW275790, AW276788, BE094185, AA558345, AA654640, AV743295, AA558510, BE676942, AA557706, AA557822, AW207035, BG223416, AW265566, AA559325, AW238403, AA558026, AV739745, AV760038, BG223515, AA578392, BG222140, AA558224, BF478305, AA578270, AA559188, BF958015, AW262059, BF478270, AA557769, AW270791, AA559277, AA569545, BG223580, BE085317, BG059176, AA559172, AW858170, AA507151, BG232125, AA627329, AV740217, AV701975, AA559340, BF941579, AA558286, AA548031, AA570788, AA502836, BG232137, BG230527, BG222163, AA577934, AA557810, AA559582, AA559288, BE085236, AA558019, BF885059, AA559233, AW963105, AA558045, AA578106, AI742874, AW593405, AW858152, AI825755, BG222255, BE503281, AA557725, AA502815, AI123361, AA559881, AI972281, AI350499, AI654949, BE672982, AA343913, BF478285, BG231208, BF475685, T57040, BF992614, AA558319, BG154204, AA558147, AA578489, BE073960, BF798988, AA578006, AA506533, BF001678, AW803144, AA558054, BE073961, AA559226, BG222123, BF592287, AA559152, AA558819, AA244130, BG222234, W20451, AW265531, H55799, BG222065, AA229363, BG230470, BF798970, AA559939, AA618488, AA635453, AW974805, AA650082, X04992.1, AF052051.1, AL160155.19, X04236.1, AL162581.11, AL137230.3, X05490.1, AC025770.5, X04235.1, AC007397.21, AC006334.3, AC007535.3, AF312913.1, AC011243.8, AC008114.25, AL391097.13, AC007957.36, AC008716.6, AP000556.2, AP000552.1, AC023490.5, AC073838.6, AL354766.17, AC015798.7, AL583828.4, AL132765.38, AC010305.3, AP000233.1, AP000147.1, AP001692.1, AC010374.5, AC010418.6, Z93241.11, AC018765.4, AC023468.6, AC005684.1, AL133519.28, AC005064.3, AL049710.18, AL033392.5, AL121752.13, AL117374.39, AC078889.20,

HMSKC04	357	799540	1 - 1403	15 - 1417	<p>AC006000.2, AC002301.1, AC010219.4, AL160237.4, AC008417.3, AC012603.6, AC007383.4, AC016732.7, AC087432.2, AC087427.2, Z98949.1, AL591398.2, AL359542.13.</p> <p>BF843276, AA483606, H73550, AA570740, AV695478, AL623764, AW969743, AI342183, AA568204, AI369580, BF811714, BE315483, BG180976, BF804359, C75622, AI278089, CI5060, AA829036, AW194325, AW161016, AL138182, AV763057, AC010191.24, AC004590.1, AL121586.31, AF168787.1, AP000046.1, AP001714.1, AL445686.14, AF222856.1, AF222854.1, AF222855.1, AP000104.1, AL138849.12, AL109758.2, AP001721.1, AL121758.24, AC008994.3, AP000512.1, AP001717.1, AL513008.14, AC018663.3, Z93017.6, AF042484.1, AJ003147.1, Z94056.1, AL118525.17, AC008738.6, AC011472.7, AL139342.7, AC005015.2, AC005756.1, AL355392.7, AC020906.6, AL136300.22, AC018755.3, AL512883.5, AC013429.12, AC004867.5, AL365445.11, AC005231.2, AC073347.3, AL391259.15, AJ400877.1, AC006236.1, AP001726.1, AL354720.14, AC005874.3, AF134471.1, AL136295.3, AL096840.25, U63630.3, AC069285.8, AC005295.1, AC004166.12, AC008753.8, AP001718.1, AL121845.20, AL136418.4, AL139054.1, AL049869.6, AC005049.2, AL049713.20, AC004150.8, AF002223.1, AC007938.1, AC010271.6, Z83844.5, AC079316.15, AL163281.2, AL157823.9, AC010530.7, AP000045.1, AP000113.1, AC007129.3, AC004228.2, AL158207.15, AL133163.2, AC011510.7, AC015801.25, AC010319.7, AC002544.1, U91326.1, AF307337.1, AC005971.5, AP000466.1, AC007374.6, AC002558.1, Z85987.13, AC008521.5, AC006238.1, AC005071.2, AL121771.17, AC006160.9, AC005940.3, AC004686.1, AC006040.3, AC013355.7, AC017033.5, AC005522.2, Z93241.11, AC011465.4, AF015416.1, AC005378.2, AC020552.4, Z99755.1, AL034549.19, AC090005.1, AC006965.3, AC011449.6, Z95113.2, AP001747.1, AL139035.27, AC007225.2, AP002852.3, AC009086.5, AC004024.2, AC004814.2, AC068319.4, AL132825.35, AL365444.11, AL163280.2, AF139813.1, AL356806.4, AP000787.4, AC011461.4, AL049871.4, AC005291.1, Z95152.1, AP001711.1, AC069262.24, AL355385.15, AL136137.15, AC006121.1, AL031283.26, AC011484.4, AL355589.8, AP001754.1, AC072052.6, AC005914.1, AC004983.2, AL121897.32, AL049709.18, AL096791.12, AL050307.13, AL133215.16, AC008805.7, AL132772.14, AC084865.2, AF047825.1, AF111167.2, AC005747.1, AP001705.1, AC044797.5, AL158830.17, AL050331.11, AC005103.3, AC004953.1, AC004051.1, AP001712.1, AL049569.13, AL354873.19, AL031311.1, AC051619.7, AF124523.1, AP000665.5, AC011736.4, AE000658.1, AC004701.1, AC068799.14, AC003684.1, AL138743.5, AC009570.13, AP001745.1, AL022322.1, AC072061.8, AP000014.2, AC083866.2, AL137129.4, AL121594.6, AC011895.4, AL133246.2, AL031587.3, AC004963.2, AE006467.1, AL161937.13, AP002812.3, AL450104.14, AC004878.2, AL121827.33, AC090509.1, AF121897.2, AC008747.5, AC005668.1.</p> <p>BG256587, BE548463, AL134548, BE867461, BE409149, AW854259, AW854064, AI968217, AI651409, BF828833, BG258304, AL134549, BF825872, AI760574, AW502392, BF769439, AI146791, BF828754, AW503066, AI917343, BF846301, AL135082, AW001418, AI964094, A845693, AW406355, AI203511, AA527307, AA232749, AW014101, AI972765, AI963870, BF892538, AI911155, AW854215, AI573189, AI970351, AI951888, AW854211, BF590826,</p>
HMTBI36	358	130145 I	1 - 3374	15 - 3388	

					<p>BF868515, AI432373, AW854189, AI671531, AA741075, AA527993, BF931296, AI147562, AI650589, AA535004, AA809634, AI523816, AI372088, BE504805, AI654213, BG117158, R73344, W16731, AI810884, AI376373, AI867208, AI684987, AI952939, AA504770, AI439038, BF904642, AA927544, AW505179, AI336803, AI631696, AI420438, AI288066, AW501928, BF826497, AW504864, AW013985, BF760209, BF894715, AA829400, AW500832, AA653458, AI582571, AI867525, AI637622, AA483816, AA491154, AA836167, AV650735, AI587126, AI873559, BE219008, AA505113, BE734806, AI651931, AI638281, AI760522, AI400323, BE840233, BE840224, AL134637, AI783674, AI825752, H26511, AA825621, AA926792, BE840052, BF899615, AI742276, BE505014, AW881791, AA505879, AI673191, BF064023, AW087760, BE074795, AI380678, AI341372, AA491313, AI339197, AI971063, AI673213, AI627934, BE825164, AI653411, AA421004, BE763396, N90130, AI366056, W68390, BE763404, AI382284, AW779768, BF955986, AI653256, AW137621, AI921836, AA489461, AA595019, AI867819, AA036799, AW080786, AI640862, AW843282, AI825291, AI741634, AI741624, AI583597, AI401569, AW082567, AA243210, AI695600, AW204751, BF898711, AI700098, AI383831, AI887999, AI783742, AA830462, AW190430, AA649133, BF869456, AI865022, AW196390, AA729793, AW050752, AI829248, BF896969, AW006740, AW196980, AI989644, AW050892, AW025728, BE463887, BF755327, AI816737, BF221884, AW009307, AI452837, AI985048, AI990376, BF882183, AA421085, AA885063, AI701658, AW015700, BE046026, AW575887, AW138417, AW002832, AA603726, AI829182, AA490961, AW969133, AW192748, AA252626, AA877835, AW732209, AI474698, BF897876, AA768934, AA806669, AB01112.2, Z94796. 1.</p>
HMUAP70	359	872208	1 - 1951	15 - 1965	<p>BE613319, AV687447, AV725712, AV687625, BG166531, BE612728, BG114876, AV686519, AW952404, AV725638, AI061630, BE877777, BF055022, BF439548, BF692350, BF732575, BF967994, BG054984, AW372569, BE866270, AW160677, AV706186, BF690981, AA813278, BF206792, BE876393, BE645016, AV728247, BF195583, AI612729, BF446480, BF210620, AW167859, AW167862, AA521082, BF445077, BF698977, BE348758, AW753532, AA161332, BF665995, BF195330, AI806813, AI887683, AA843967, AA525839, AI869290, AA447934, AW068627, BE881059, AI912708, AA843171, AW206294, BF673423, AA402367, AA910679, AA037122, AI091239, AI422091, AA287736, AI816253, AI802199, BE042949, W56256, AW156905, AA779099, AI057601, BG168894, BE327200, AA781082, AA496466, AW022886, AW275342, AI091181, BE218417, AA873496, AI290167, AA992894, AI168731, N35917, BF028133, AI929639, AW003760, AA287895, AA774263, N22752, AA843277, BF001600, AI685261, AA283859, AI678620, AW403982, AA984140, AA056053, AA907413, AI361356, BF572327, AW157133, N94537, AI816334, H15827, BE383297, BE218532, AA931689, W17196, BE538941, AI027113, W33009, AA293343, AI079727, AW161562, AV749347, N92441, BE673987, W23456, AA410485, D81853, AA935683, D58802, N27027, H99819, AI004733, N30220, AW516664, BE702242, AA452710, N94329, BF692523, AW470953, BF681161, AI566161, AA258458, BE077323, AA910558, AI128706, AA664059, AI446094, AA872758, AA725042, AW160789, AV684142, BF762393, AA861311,</p>

BE167341, N34534, AA846407, AA918516, BF762409, AA973796, AW073424, AA448868, N59261, AA857543, AA399445, AA515285, R90917, AA399423, AA911982, AA995135, BF036554, AW513259, AA577338, AA872812, T63367, AI423456, AA643728, AI027067, AA293329, AW162091, AA085090, R56184, AI245725, BF436213, BG109166, H23642, AI973249, AV650608, AV686647, BE928331, N68929, R64440, AA029562, H13310, W46630, AA114922, H41386, N57112, AA258388, AA744562, AA993782, AI499779, AI571822, AA744564, AA10152, AA029728, Z43644, AA837702, Z45519, AV689458, AA620561, AI093848, AA602387, AA421573, AA922986, BE564509, C14582, R12614, AA410303, AA782100, AW083148, N36220, R32391, AA055763, AI570545, AA939289, R90813, AA112870, AI207050, H16135, N89859, F06244, AW162345, W92571, AI027262, AI149386, AW023549, R63828, AA311835, AW517389, H38655, AI348632, AW015099, T54934, AI826301, BE464247, AI360861, W30811, AI028088, AI768693, AI307614, AI343572, R32390, AI744258, AW276195, AA055962, AA724357, R42373, AW206298, AI167826, N78834, BC004317.1, AC004752.1, AK025312.1, AL583915.1, AL353956.1, AL122045.1, AK025209.1, AK026480.1, AL389935.1, AK026542.1, AL136790.1, AF159615.1, AL122050.1, AF125948.1, AF217982.1, AL049382.1, AF353396.1, AB063100.1, AL162002.1, AL080163.1, AJ299431.1, AF058921.1, S78214.1, AK000450.1, AF358829.1, Y16645.1, AK025414.1, AF321617.1, AL136928.1, BC002454.1, BC000556.1, AL353940.1, AK000718.1, AL137429.1, AL136844.1, AL512689.1, AL442082.1, AF061573.2, AK027193.1, AL122123.1, AK000618.1, AF217966.1, BC004958.1, BC003695.1, AL137537.1, AK025375.1, AB047904.1, AL133665.1, AL080159.1, BC006480.1, AK026885.1, AL117460.1, AL050116.1, AL389939.1, AK025465.1, AJ012755.1, AL136893.1, AK026550.1, AL133557.1, AL049452.1, AL137533.1, AL133113.1, AF106862.1, BC008365.1, AK027204.1, BC006332.1, AK000418.1, AK026642.1, AL049314.1, S76508.1, AF143723.1, AK026865.1, AK025378.1, BC009033.1, AB060826.1, AB052191.1, AK025541.1, AL137550.1, AL137547.1, AF090901.1, AL110222.1, AL389982.1, AL136799.1, S61953.1, AF026816.2, AB048953.1, AL137271.1, AB055352.1, AB050431.1, AL110158.1, AL096744.1, AL117432.1, AK024538.1, AF271350.1, AK026408.1, AL136850.1, BC007326.1, AK026583.1, BC001967.1, AB048975.1, AB060839.1, BC007567.1, AF155827.1, AL136845.1, AL137294.1, AL136882.1, AF242525.1, AF090934.1, BC003683.1, AF090943.1, BC006440.1, AK026744.1, AB056421.1, AB060916.1, BC008485.1, AF090903.1, BC005678.1, AF090896.1, D83032.1, AB049848.1, AB055361.1, X53587.1, BC004530.1, AB060211.1, BC002523.1, BC007198.1, AL136780.1, BC008078.1, BC002844.1, AL136892.1, BC002733.1, AK027868.1, AK026532.1, AK026591.1, AK000652.1, AL122110.1, AB048913.1, AB048919.1, BC004951.1, AL050172.1, AB056420.1, AK026746.1, BC003682.1, AL133075.1, AK025524.1, AL133072.1, AK026462.1, AL133560.1, AB060912.1, AK024992.1, AK025967.1, AK026855.1, AB047623.1, BC004899.1, AB060897.1, AL117583.1, AB060863.1, AL117416.1, AL512733.1, AB060929.1, BC001964.1, AK025435.1, AB056809.1, AL137711.1, AB056372.1, AL162062.1, AK026627.1, BC002466.1, AF252872.1, AF274348.1, AK026927.1, AL023657.1, AF274347.1, AL157431.1, BC004264.1, AL137488.1,					
--	--	--	--	--	--

					AL050155.1, AF056191.1, AL137292.1, BC003687.1, AK027114.1, AK026504.1, AL049300.1, AL049938.1, AB047878.1, AK026630.1, AL136792.1, AK027144.1, AL137558.1, AL512765.1, AL050024.1, AK024594.1, BC002365.1, BC006509.1, AL137705.1, AB062942.1, BC008899.1, AK026959.1, BC007456.1, AF202636.1, AB048974.1, AL136540.1, AL162006.1, BC004244.1, AL133014.1, AL359618.1, BC004215.1, BC003122.1, AL136805.1, AF207829.1, AF078844.1, AK027113.1, AL049460.1, AK000247.1, BC002839.1, AL137478.1, AK000323.1, U39656.1, AB063008.1, AK026762.1, AK026784.1, AL133077.1, AB055303.1, AL359601.1, Z37987.1, AB055368.1, AF090886.1, AB060887.1, BC003548.1, AK027142.1, AL137256.1, BC007346.1, AL080148.1, AL133619.1, AL050393.1, AL137548.1, AK027136.1, AL122121.1, AF285167.1, AL390167.1, AL359941.1, AL512750.1, BC008673.1, AK027096.1, AK026528.1, AF245044.1, AB063070.1, T54768, T63693, T91023, T84597, R13763, R18327, R20519, R25031, R43789, R53025, R20519, R43789, R55911, R81848, R81849, R90812, R90918, H53640, H53684, H86289, H97448, N25711, N43983, N59141, N75178, N76730, W31472, W31935, W35396, N89770, AA018416, AA019585, AA122341, AA565211, AA583521, AA613126, AA767024, AA807259, AA829478, AA831898, AA876196, AA906972, AA932624, AA953784, AA953789, AA975996, AI028021, N56132, C00677, R29165, AA092968, AA679878, AA782815, AA890689, AI042642, AI041151, AI093012, T24514, F02527, F04381, F04532, F08307, AI244846, AI276792, AI279043, AI298862, AI334644, AI348509, AI364763, AI202774, AI453449, AI400913, AI401566, AI417788, AI418178, AI498899, AI419614, AI582814, AI423417, AI127285, AI147786, AI148738, AI167754, AI187454, AI652739, AI219638.
			1 - 1368	15 - 1382	AI419891, AL042667, AL042670, AC005661. 1.
HMVBN46	360	626667	1 - 1368	15 - 1382	AL526504, AL527976, BG025328, BF981832, BE893035, BG120208, BF037986, AA127629, BG116095, AV756005, BF337754, BG251098, AL526558, AL514858, BF000345, AW957722, BE907226, BE222397, AL527977, AA121531, AA121524, AA127621, BF528462, BG231815, AI310156, AI885185, BF382067, AI653011, AI816920, BF196680, BF059268, AI917727, AI492163, AA058429, BF665058, BE747130, AI703500, N94375, AW952799, AA522819, AI393275, AI633828, AA447649, AI129541, AI569654, BF058861, BF035607, AI554669, AI199561, BE466167, BE467836, AI597911, BG231643, AI146460, AI769369, AI955872, AI651857, AW327517, AL042115, AL514857, AI127476, AV717137, AI950367, AW468274, AA101965, AI422804, AI342065, AI422130, BF382605, HI5332, AA780184, AI871310, AI637864, AA694161, W69776, BE903609, AA290675, BF541725, AI635393, N36538, AW016914, AW006534, BF038419, W94341, AI990389, AI289096, BF437625, AI634575, AA449346, AL047918, AI289186, AW352206, AI631814, T33895, AI336104, AI424274, AI052494, AI128384, AA722755, AA447041, AA602552, AI422522, AI040930, AI206504, AW590779, W69815, N92885, AW327573, BF092265, AI801837, AA758972, W88501, BF813945, R79538, AA868142, T31813, AI611065, AI459447, AI659739, T56923, AI969469, AA352595, AA443656, BF941829, AA486658, AI685615, AA886726, BG055808, AV693706, AI002067, AW518815, BF934511, BF939332, AA609306, AA056750, BG118168, AA099632, AI129170,
	626667		1 - 1368	15 - 1382	
HMWEB02	361	638159	1 - 1741	15 - 1755	

					AA49605, W94371, AA815345, AI000931, AW235150, AW183661, AI221619, AW025692, AI186632, AA835539, AW580950, AV735997, W88602, AA351880, W25565, AI198123, BF813939, R85624, AA339237, T56924, R14227, BE208337, AL047917, Z46193, R40646, BE645348, N41512, T32911, AA214738, Z41816, AV714154, BE716957, AA486561, BF726556, AA291082, AI802221, AA448053, AA999697, H15715, T39692, AI699002, BE903562, AI612836, AW196460, BF446192, AI005381, AA722994, AW235727, AI203197, AI632619, AA703990, AI597695, AI685664, AI971096, AA678759, AI364856, BE708514, AA425266, BE206482.
HMWFO02	362	135219 8	1 - 533	15 - 547	AI801412, AL353701.15, AP000252.1, AP000134.1, AP001711.1, AC005332.1, AC004967.3, AC005488.2, AC016587.7, AP000031.1, AC004166.12, AL13332.12, AC074121.16, AC004962.1, AC010422.7, AC069262.24, AC018808.4, AC004890.2, AC006088.1, AC034193.4, AC084729.2, AF139813.1, AL354864.16, AC007993.15, U78027.1, AC004228.2, AL121890. 34.
HMWGY65	363	130828 7	1 - 1960	15 - 1974	AW963001, BF059395, AW466899, BF590276, AI582610, AI281917, AI983184, BE501967, BF848401, BE219310, AI359514, AI582296, AI033082, AW594623, AW770514, AI088503, AI307166, AI818405, AW272259, AI143722, AW204164, AI590378, AI285806, AA004670, AI580084, AA904597, R51653, AW293660, AA968840, AA358991, AI278964, AW970496, AA836864, AA699611, BF003024, AA292694, T05806, R51562, AI935808, AW243480, AW243365, R14788, AV741332, F37583, AA365140, AI814209, BE842966, AA004251, AW103604, R40100, H46612, AI270512, AA092304, AI989617, R63257, AV734885, AL161751.2, AL450109. 3.
HNEAC05	364	519340	1 - 876	15 - 890	BF095683, BF767062, AI121059, BE082604, AB011104.1, AP003473.2, AP001573. 3.
HNEEB45	365	103639 7	1 - 1029	15 - 1043	AW007722, F08319, CI4331, AW978633, D80132, AV718681, AW949655, L81855.1, AC003677.1, AC048330.20, AC018769.2, AL513342. 7.
HNFFC43	366	753337	1 - 2089	15 - 2103	AL048903, AI678076, BF527660, BE728354, BF317174, BE409263, AL530934, AL042801, BE729268, AL041340, AL530935, BE314879, AL042802, AW190561, BE313085, AI961484, AU154235, AU132769, AW027201, AI424792, AL524550, AA864499, AI432437, AA917094, AI934618, BE327057, BE383358, AI499074, AI344032, AI955647, BG253760, AA572961, AL048902, AW769938, BF509684, BE208853, AI342638, AI761488, AW732625, BE259667, AW974120, AI564533, W51904, AW961340, AI289643, AW971194, AW272378, BE297579, AI867205, AI796156, AA884306, BF002574, BF927739, BE885728, BF847648, AA456581, AA918441, AL524551, BF918942, AI766564, AW769937, AA493778, BF918936, AA304712, BF869582, AI168435, AU126961, AA298993, AA377693, AW769673, AI383037, H67555, AA322347, AA221032, AA713594, AI366484, AL039675, BE273248, F24965, AW97208, AA426295, AA322180, AA322590, BF919436, BF919454, BF919453, BF919451, AW178871, AI538564, BF752997, AI766348, AI701097, AW080090, AI367680, BF812961, AI619820, AI633125, AI828682, AI818240, AW152182, BF811804, AI796113, BF968679, BF669151, AI800648, AI500714, AI702073, AI884318, AI590043, AI868680, BG122005, AA740450, AI866469, AI971615, AI345415, AI934259, AI570056, AI433157, AL046466, AI819545, AI499570, AI698391, AI440448, AI915291, AI434731, AI445829, AI889189, AI638644, AI370623, AW188525, AW008226, AI699823, T69241, AI635634, AW148363, AI818350, AW089844,

					<p> A1686817, A1376425, A1609375, AW051088, A1744268, AV736995, BF970652, A1569637, AW163834, A1270295, BE393784, A1471282, AW075381, AL043355, A1872423, A1801460, A1620864, W74529, A1421252, BF812938, AW081256, A1581362, AL513817, AW193911, A1670009, A1871697, A1537261, A1950729, AV709679, A1651840, A1281757, A1619502, A1591387, A168822, A1473536, AW196720, A1345612, A1620056, AW834282, A1046595, A1677796, A1582932, N21402, A1922266, A1500061, A1474646, A1345416, AW079409, AA641818, A1621341, A1702068, AW081383, A1633198, BF814761, A1619662, T49776, A1565172, A1696714, AV747571, A1524179, BF766531, A1366900, A1521560, BF925771, A1927233, A1536638, A1479292, A1564719, AW027898, A1419826, A1432969, A1432030, A1799183, AW238688, A1932966, A1354643, AW168788, A1401697, A1357940, A1890214, AW078712, A1250627, A1636507, A1357273, A1634345, A1579901, A1352497, AV711455, AW104724, AL514079, A1783825, A1612852, A1956080, A1524654, AW104827, A1445025, A1815232, AW198090, A1684244, AL513761, AW078606, AW083374, AA830709, AW192652, AK001356.1, AF260728.1, AL137599.1, AK001651.1, BC008337.1, AB033000.1, AF351620.1, AF183393.1, AL389935.1, BC003573.1, AK026408.1, AL117587.1, BC008591.1, AL080159.1, BC006103.1, AK026462.1, AL137530.1, BC002466.1, AK026744.1, AK026593.1, BC003101.1, AL133075.1, AL137537.1, BC005825.1, AK000418.1, AL136850.1, AL023657.1, BC001199.1, AK026389.1, BC004945.1, L19437.2, BC004349.1, AL122104.1, AL050149.1, AL389982.1, BC006181.1, BC001964.1, AB047878.1, BC002631.1, AL050138.1, AB050410.1, AB050421.1, BC006345.1, AK000414.1, S76508.1, BC008686.1, AF115392.1, AL389947.1, AF232009.1, AL050155.1, AL050366.1, AB050510.1, AK026464.1, AF131821.1, AK027144.1, AL137533.1, BC003658.1, AF245044.1, AB052176.1, AL137711.1, AF274348.1, AF274347.1, AL137480.1, BC002733.1, AL359941.1, AL133637.1, X82434.1, BC008364.1, AL080146.1, BC004925.1, AB060897.1, BC005168.1, AB056421.1, Z82022.1, BC002970.1, BC003590.1, AL353940.1, BC001844.1, BC004264.1, AL049452.1, AL117416.1, BC008717.1, AF132730.1, AB050431.1, AF090903.1, D83032.1, AK026633.1, AK025889.1, AL162083.1, AL137271.1, AF218006.1, BC003569.1, AK027204.1, BC004336.1, AL583915.1, BC001655.1, BC006287.1, X99971.1, AL080148.1, AL110280.1, AL137476.1, AF205073.1, BC008063.1, AB060916.1, X59812.1, BC003684.1, AL137292.1, AL133077.1, BC006487.1, AK027096.1, BC001785.1, AK027173.1, BC006410.1, S77771.1, Y14314.1, AL133062.1, AL050143.1, AF044323.1, AF195092.1, AY033593.1, X15132.1, BC003410.1, BC005678.1, AL080154.1, AK000636.1, AB055331.1, AF339775.1, AK025435.1, BC008037.1, BC006458.1, AL122100.1, U73682.1, AL133619.1, M85164.1, AF230496.1, AL442083.1, AL137574.1, AF285167.1, BC005002.1, AF169154.1, AF038847.1, AL136615.1, AK027095.1, AL162003.1, BC003056.1, AL390184.1, BC007571.1, AK025350.1, AL110221.1, AK024747.1, AF262032.1, AF106862.1, AL136805.1, AL133665.1, AC006288.1, AF002672.1, AK026556.1, BC004181.1, AL133084.1, BC002365.1, AK024992.1, BC007206.1, BC000550.1, BC006091.1, AB048913.1, AK026746.1, AL110158.1, AF184965.1, X78627.1, AB047627.1, AL133623.1, BC009294.1, AY034001.1, AK026532.1, AL162002.1, AF026816.2, BC000199.1, BC008649.1, </p>

					BC003591.1, AJ299431.1, Y13350.1, AK025099.1, BC004362.1, BC007460.1, AL512733.1, AB056420.1, BC008075.1, BC000090.1, AK025798.1, AF106697.1, AL136889.1, AL136893.1, AF199509.1, AF124728.1, U37359.1, AK025113.1, BC008078.1, BC004556.1, AF202636.1, D44497.1, AL133049.1, AF061573.2, AL157433.1, AL136784.1, BC008417.1, BC005070.1, AK026528.1, AL137478.1, X83544.1, AB060834.1, AL136844.1, AK000266.1, AL357195.1, AK027160.1, BC001305.1, AL137488.1, AL117435.1, X99226.1, BC004222.1, AL137550.1, AL161628.9, BC007021.1, Y14040.1, AF218000.1, AF141289.1, AK026613.1, AL117460.1, AF126488.1, AL080139.1, AK027365.1, AJ296345.1, AL137298.1, AL137716.1, Z35309.1, AL137627.1, AK000476.1, AK026550.1, AL359624.1, AL389939.1, AB048953.1, AL512684.1, BC000253.1, BC002370.1, BC002849.1, AF217987. 1.
HNFU96	367	460611	1 - 442	15 - 456	BF062478, AC006238.1, AC002551.1, AC024028.10, AC013717.8, AC005529.7, AC008440.8, AC005089.2, AC068533.7, AC002301.1, AC020913.6, AC008569.6, AL138776.10, AC074121.16, AL162426.20, AC005562.1, AC020928.6, AL020997.1, U91321.1, AP001718.1, AC009244.24, AF030453.1, AC007256.5, AL163279.2, AL121579.4, AC006211.1, AC025438.5, AC091118.2, AC002299.1, AC006483.3, AL450263.15, AC006012.2, AC011465.4, AC008635.6, AL122001.32, AL008730.1, AC078962.30, AL162458.10, AL139415.10, AF053356.1, AC020934.7, AL009031.1, AC010319.7, AC068799.14, AC005088.2, AL359091.10, AL137059.20, AC004967.3, AC004491.1, AC005682. 2.
HNFJF07	368	577013	1 - 602	15 - 616	AA487061, AA486615, D78759, AC002091.1, AC004089.25, AC005015.2, AC039056.7, AC006329.5, AC005081.3, AC084693.2, U91323.1, AC002352.1, U82668.1, AL391259.15, AL109897. 30.
HNFJH45	369	410107	1 - 561	15 - 575	AL512382.12.
HNGAK47	370	561488	1 - 1130	15 - 1144	AL390802.2.
HNGAP93	371	520227	1 - 689	15 - 703	AW064091, AC005344. 1.
HNGBC07	372	103763 1	1 - 1635	15 - 1649	D80268, AW960553, D80212, D59859, AW966534, AW978661, AV720151, D80253, AV701839, AW952839, AV699447, AW958993, AW973490, AW959597, D59619, AW978634, D80210, D80240, D80366, D59889, AW959799, AV720878, D51423, AW966331, AW949656, D80439, D80219, D57483, AW973482, AW966059, AW966398, AW966342, AW966369, AW973474, AA305409, AW975613, AW966368, AW959136, AV718489, D80166, AW973445, AW964967, C14389, AV719557, AV720616, D51799, AV722801, AV719822, AW966053, AV718692, AW973307, AW973447, AV719324, AV718938, AV718633, AW975605, AW966378, AW975618, AV719913, AW950578, AV718707, AW973488, AW966386, AW960454, AV720211, AV718931, AV720729, AV720731, AW973334, AW966388, AW966397, AW949498, AV723927, AV699866, AW949642, AW973473, AW959202, D81030, D80391, D59787, AW966029, AV718440, AV720028, AW966075, AW966065, AW966022, AW964737, AW960465, D80188, AW966332, AW966399, AW966531, AW958992, AW956397, AV702451, AW966041, D58283, AW966333, AW966013, D59275, D80248, AW960483, D80038, AW962082, D80022, AW949586, C14331, D80024, AW966330, D80195, AW975621, AW978648, AW966385, D59467, D80247, AW959582, AV692290, AV654329,

					AV655880, AW965163, D80164, AW973541, AW966030, AW964488, AW949641, AV720791, AW952852, AW966054, AW949645, AV720203, AW964756, AW966050, AV719188, D80043, D80227, AW949657, AW966062, AV719783, D59502, AW959628, AW960473, AW965177, AW959570, AV719468, AV718800, AW965185, AW965197, AW965196, AW973485, AW965184, AV720104, AW965175, AW966400, AW962395, D80196, AV718844, AV720464, AV718770, AV720150, AW966380, AV700229, AV724520, AW959062, AW964477, AW956434, AV699550, AW949500, AW964468, AW949654, AW964532, AV699927, D80251, D59610, C14014, D51060, D51022, AV720533, D81026, D80269, AV726330, AW966032, D80133, D50979, AV750778, D80522, AW966343, D50995, AW973330, AW975623, AW949629, AW949653, AW949631, AW949643, AA514186, AW949618, AW949655, AW966329, D59927, D80157, AV719945, AA305578, C15076, AV718530, AV719632, AV718487, D59653, AV719049, AV723097, AW966043, AW965176, AW973465, AW961136, D80193, AW965158, AW962245, D80045, AW949633, AW959469, AW978642, AW966389, AW960532, AV721386, D51759, AW949646, AW949632, AW949658, AV702365, AA514188, D80302, D80241, AW360811, AW966377, D80378, AW752082, AW753053, AW177440, D51103, AV720035, AW950117, AV699652, AV699746, AW949630, AV700889, AW966023, AV720812, C06015, AV702035, AW966379, AW178893, AL022339.1, AL021937.1, AB028859.1, AF058696.1, AB002449.1, AF271371.1, X67155.2, D34614.1, AB038216.1, D88547.1, D50010. 1.
HNGBT31	373	408334	1 - 625	15 - 639	AA780406, AC003089.1, AC005367. 1.
HNGDG40	374	532617	1 - 506	15 - 520	
HNGDJ72	375	532619	1 - 510	15 - 524	AC027689.10.
HNGDU40	376	597526	1 - 1021	15 - 1035	AA613157, C14389, D80043, C15076, D80045, AV718707, C14429, D59787, AV700229, C14014, AV719049, D50979, D59502, AV699669, AV719324, D51250, AV699866, D59467, AV701130, AV701149, AV742720, AW966053, AV719913, AW949656, D80166, D59619, D80210, D80391, D80240, AV723927, AW978634, D80212, AV720211, Z21582, D80196, AV718844, AW949642, AW975621, AV719468, AV744770, D81026, D80219, AV699447, AV719822, D81030, AV718692, AV701004, AW966531, D59859, D51423, AW973307, AW949655, AW949629, D51799, AW960553, D80253, D58283, AV718489, AW949631, AW949643, AV719557, AV720731, AV722801, D80195, D59889, D57483, D80188, AW949653, AV720034, AV719783, AW975618, AV720464, AW959202, AV718800, AV720203, AV719188, D80227, AV718770, AW966062, AV720028, AW959628, AW959570, AV724520, AV720150, D80193, AW965158, AV699550, AW966534, AV699927, AW966054, AW973447, D80949, AV699682, D80022, D59927, D80269, AV718440, AW949645, AW949657, D80038, AV700895, D80366, AV701123, AW959582, AV723097, AW965177, AV721386, AW966013, AW949641, AW949633, AW949632, AW949618, AV700622, AW966043, AV700889, AV720812, AW966050, D59275, AW978661, AW966041, AW949646, AV718681, AW949658, AV700159, D80024, T03269, AW959597, AW960414, C75259, AV718633, D50995, AW975605, AV720791, AW949654, D80378, AW964488, AW960465, AV720654, AV699746,

						D59610, AW965176, AV718931, AV701422, AW959799, AV742001, AV742667, AV701125, AV701335, AV701166, AV701043, AV701332, AV701017, AV701248, AV701431, AW964737, AV719628, AV745847, AW978648, AW973485, AW973541, D58253, AV645389, AV742048, AV645344, D80134, D80241, AW973488, AW966022, AV701419, AV701154, AV681510, AV681491, AV745853, AV700313, AV718938, AV701443, AV742430, AW964756, D80164, AW959136, AW959469, AV699479, AW962245, AW973334, F13647, AW964756, D80164, AW959136, AV701344, AW958993, AW965163, D59695, AW966065, AW966029, AV743008, AV701151, AV720220, AW960564, AW958992, AV719000, AW959062, AW964477, AW956434, D51060, D80168, C14331, AV745080, AW973474, AW965184, AV719876, D81111, AV701428, AW965197, AV701415, C14227, AW956397, AW966059, AA305409, C14298, AV681529, AW973470, AV681468, AW966075, AV701021, AW965185, AW973330, AW960504, AW962082, AV721784, AW960454, AW965196, AW975613, AV723247, AV718530, AV720878, AW978633, AW966560, AW178893, AW965175, AW973482, AW975623, D80064, AW973465, AF271371.1, X67155.2, D34614.1, D88547.1, AF058696.1, AB028859.1, AB002449.1, D50010.1, AB038216.1, AB033111.1, U79457.1.
HNGEO29	377	532622	1 - 477		15 - 491	
HNGEP09	378	499076	1 - 1028		15 - 1042	AW275971, A1369580, AW576034, AL353692.14, AC004638.1, AC027319.5, AC007011.1, AL354932.26, AK000932.1, AC074121.16, AC019171.4, AL390374.16, AJ400877.1, AL158830.17, AL109897.30, AC008403.6, AL121929.17, AC016025.12, AC002390.1, AL360227.17, AL049709.18, AL353777.18, AC004890.2, AC005098.2, AC005015.2, AL354794.16, AL590762.1, AC020931.5, AP001695.1, AC005052.2, AL121754.18, AC073655.26, AC004166.12, AC005225.2, AC010328.4, AC004876.2, AL133353.6, AP000553.1, AL136418.4, AL139054.1, AC004985.2, AL354873.19, AL121897.32, AC003962.1, AL121972.17, AC011472.7, AC011462.4, AC073316.6, AC079602.15, AL590763.1, AL023575.1, AC007216.2, AC005049.2, AL139095.15, AC005033.1, AD000092.1, AL133453.3, AC011514.3, AC008072.3, AC009123.6, AC006130.1, AC005899.1, AC005800.1, AC016995.4, AL021368.1, AP003439.2, AC005740.1, AC004893.1, AC013726.7, AC007546.5, AL031727.42, AL109984.14, AC005280.3, AC020629.6, AL445490.6, AP000067.1, AC003010.1, AP000506.1, AC004520.1, AL121586.31, AB043547.1, AP000501.1, AC007030.3, AE006467.1, AC012476.8, AL512347.14, AC010203.13, AC004217.1, AL133387.8, AC051619.7, AC002504.1, AL096791.12, AL133347.28, AC004826.3, AC004910.1, AL031663.2, AC006544.19, AC069282.6, AF111168.2, AC005089.2, AC002551.1, AC020908.6, AL022323.7, AC011443.6, AC005914.1, AF001548.1, AC010271.6, AL049569.13, AC079630.18, Z93015.9, AL133246.2, AL356299.16, AC002984.1, AL121658.2, AC006088.1, AC006349.3, AC006125.1, AL096840.25, AC005971.5, AB000882.1, AC005519.3, Z93241.11, AL031447.4, AF196969.1, AC007686.5, AC005041.2, AC016587.7, AC009144.5, AC010618.7, AC009137.6, AL121903.13, AL512378.7, AC024028.10, AL117381.32, AC008392.6, AP003357.2, AL137162.25, AL139317.5, AC004626.1, AC006329.5, AL139396.17, AC007956.5, AC020552.4, AL139352.16, AC003065.1.
HNGHR74	379	553443	1 - 1081		15 - 1095	

HNGIH43	380	410179	1 - 413	15 - 427	AC020644.6.
HNGIJ31	381	519120	1 - 782	15 - 796	AU147901, AA376128, BE562634, AC051619.7, AC020629.6, AL445531.10, AC009412.6, AC005052.2, AC079383.17, AL009172.1, AC016637.6, AK022380.1, AC004032.7, AP000555.1, AC009789.21, Z83851.17, AL359643.27, AC011005.7, AC008521.5, AC008635. 6.
HNGIQ46	382	526651	1 - 513	15 - 527	BF960121, AA170832, AA585155, D53447, CI4391, AV746334, AI541205, AV745704, AV758830, AW962651, AV755445, AV710906, AI546971, AV713182, AV717678, AV758166, AW950194, AI557808, AV762064, AV763339, AV646672, AV707414, AV756720, AV762898, AV761529, AV711001, AV759474, AV758483, AV763126, AV710831, AC006443. 1.
HNGJE50	383	561568	1 - 1023	15 - 1037	
HNGJO57	384	579737	1 - 814	15 - 828	
HNGJP69	385	604891	1 - 971	15 - 985	AL041375, BF525663, H81406, AA599712, AI952574, AC008967.3, AL035407.15, AC007308.13, AC002470.17, AC008626.5, AC010458.5, AC007263.4, AC018809.4, AC002425.1, AE006464.1, AL121594.6, AL031005.1, AC004223.1, AC018642.6, AC009783.9, AC005037.2, AC007546.5, Z82208.1, U52112.1, AC008848.7, AC005079.6, AC006329.5, AC008760.6, AL136131.15, AL121588.24, AL121809.6, AC009229.5, AL353579.17, AC015971.4, AL031774.1, AL033519.42, AP000744.4, AF278704.1, AL031258.12, AC007249.5, AF168787.1, AC005399.19, Z84476.6, AC005080.2, AC008379.6, AC008805.7, U82828.1, AL132657.33, AL109797.18, AC004883.2, AL354864.16, U96629.1, AC083884.6, AC005237.2, Z83838.2, AC002310.1, AF111168.2, AC008543.7, AC002543.1, AC026672.44, AC087240.17, AC010311.8, AL356804.4, AL132780.5, AL161670.4, Z98257.1, AC016769.10, AP001714.1, U95739.1, AC005066.1, AC002395.1, AC011482.4, AC004230.1, AC022211.5, AP000008.1, AL354935.23, AL139415.10, Z82174.2, AP001712.1, AC006023.2, AL590762.1, AC013434.8, AC010485.5, Z98304.1, AC010102.3, AC020552.4, AC006970.6, AC004019.20, AL049759.10, AL050341.18, AL133286.9, AL022316.2, AL049872.3, U63721.1, AL035252.5, AC007676.19, AF053356.1, AL109840.24, AC007316.4, AL356354.10, AL121992.24, AL445687.5, AL136126.34, AC005666.1, AP000133.1, AC019205.4, AL049868.20, AC012089.13, AC090517.2, AC003080.1, AC008044.4, AJ277546.2, AC008403.6, AC005103.3, AC010618.7, AC004491.1, AC083863.2, AC004840.3, AC006026.2, AC073492.18, AP000553.1, AL096701.14, AL049830.3, AC007050.25, Z97985.16, AC011487.5, AB015355.1, AC005476.4, AL049569.13, AL132777.4, AC004824.3, AC008521.5, AF047825.1, AL359397.3, AL160256.21, AC079833.4, AC078846.2, AP000211.1, AC007707.13, AC025519.10, D88268.1, AL008730.1, AC000134.14, AC005523.1, AC090527.3, AC008616.6, AL035681.13, AC011455. 6.
HNGJT54	386	498272	1 - 1096	15 - 1110	
HNGKN89	387	834857	1 - 911	15 - 925	BF893260, BF893278, BF893425, BF893276, BF893263, AW248583, BF893269, BF893272, BF893265, BF893275, BE856505, AI918922, BF893268, AW794915, AW904504, AW834852, BG231506, AI374775, BF893279, BE149619, BF893568, AU141987, BF997144, AI114816, BF110748, BF893405, BF942210, BF990134, BF942097, AL031674.1, AL356266.9, AL359085.14, AC019210.7,

					AC011228.9, AL117329.8, AC004966.2, U82670.2, AC005296.1, AC006992.2, AC000004.1, AP000695.1, AC002299.1, AC008276.4, AC022173.7, AL353734.12, AC025438.5, AC091118.2, AC012558.8, AC005186.1, AL049830.3, AC016395.4, AL138816.12, Z82194.1, AL359645.15, AC006080.1, AC010623.7, AC008430.3, AL163227.2, AC073090.8, AC022416.5, AC005367.1, AC074034.18, AC016138.8, AC003089.1, AL139020.5, AC083874.2, AC009276.9, AL391241.21, AC006327.3, AC009476.3, AL161717.15, AC010163.7, AC026351.28, AC012001.6, AL024507.7, AC005697.1, AC005229.1, AP000696.1, AC020740.5, AC009541.16, AP001726.1, AC004888.1, AP001687.1, AL354802.15, AC024085.5, AC005157.1, AL031778.1, AC025812.11, AC007687.16, AL357149. 13.
HNGOM56	388	836064	1 - 942	15 - 956	AA714124, AC016720.9, AL357075.17, AC008440.8, AF283321.1, AL137792.11, AC006060.1, AC004859.2, AL353668.18, AC004057.1, AL031311. 1.
HNGOU56	389	843515	1 - 728	15 - 742	
HNGOW62	390	892160	1 - 1284	15 - 1298	BF755895, AB011086. 1.
HNHAH01	391	496115	1 - 891	15 - 905	AC005187.1.
HNHCX60	392	520300	1 - 748	15 - 762	AA584924.
HNHCY64	393	520294	1 - 711	15 - 725	
HNHCY94	394	520298	1 - 592	15 - 606	AC006356.3.
HNHDW38	395	531908	1 - 779	15 - 793	AF054925, AC005971.5, AJ009616.3, AL391119. 8.
HNHDW42	396	410114	1 - 412	15 - 426	AP000313.1, AP000193.1, AP000050.1, AP000117.1, AP001718. 1.
HNHED17	397	135220 4	1 - 829	15 - 843	AC004613.1.
HNHEI42	398	985880	1 - 2628	15 - 2642	AL535686, AL512658.12, AL356791.9, AC007880. 2.
HNHFO29	399	463568	1 - 685	15 - 699	N68677, BE063506, AA659190, AW063123, AW797598, AW337282, AW074332, BF844388, AA573067, BF844391, AA504679, AA578326, AW499708, BF678990, BF913236, AA749062, AA330576, AC060231.6, AC022027.5, AC023105.7, AL031005.1, AC007221.2, AP002852.3, AP000907.5, AC007541.9, AC020663.1, AC007263.4, AC027124.4, AC004217.1, AC008569.6, AL034379.8, AL022311.5, AF001551.1, AC011472.7, AC012512.7, AC009244.24, AL590763.1, AC018695.6, AL353804.22, AJ295844.1, Z79488.1, AC01114.5, AC011465.4, AC004159.1, AC004805.1, AL356805.5, AC017111.4, AL133477.16, AC005480.3, AL049871.4, AC002288.1, AP000338.2, AL354735.14, AL031120.1, AP000216.1, AC073316.6, AL031597.7, AL138724.12, AL121759.25, AL049793.4, AC018868.4, AC007225.2, AC012085.4, AC007421.12, AL590762.1, AL034377.1, AL139233.8, AL035420.15, Z83844.5, AL354773.8, AC006455.2, AC007110.3, AC005335.1, AC007365.3, AC007298.17, AC002980.1, AC004019.20, AC004477.1, AL139105.17, AC002045.1, AC005971.5, AL139385.12, AL359552.16, AC011500.7, AC010627.5, AC011445.6, AL109827.8, AC002394.1, AL109963.4, AC020906.6, AC011475.6, AC073542.4, AC006139.1, AC006319.3, AC090939.1, AC008543.7, AC073347.3, AC010422.7, AC011479.6, AC010878.4, AL450266.9, U73647.1, AL355385.15, AL121808.4, AL160492.5, AF172277.1, AC010768.9,

					AC005516.1, AE006639.1, AC010132.5, AC004797.1, AF228703.1, AF095725.1, AC020983.7, AL139022.4, AC019206.4, AC002301.1, AC005330.2, AC091529.1, AL139035.27, AC002126.1, AL132653.22, AC004150.8, AC006468.9, AC007064.27, AC004231.1, AC005940.3, AC006213.1, AD000812.1, AC005829.1, AC025457.5, AC002401.1, AL096791.12, AL162724.16, Z83838.2, AC006581.16, AL445263.6, AC011443.6, AC005323.1, AL441883.11, AC005031.1, AC004867.5, AL445465.10, AC090937.1, AL139317.5, AF126483.1, AL445483.13, AC011461.4, AL121591.3, AC006011.2, Z82215.1, AL109613. 11.
HNHFR04	400	646709	1 - 1667	15 - 1681	AC012354.8.
HNHFU32	401	562728	1 - 593	15 - 607	AL1809098, AA758603, AA833679, AW371598, AW371593, AA524974, AC004216. 1.
HNHOD46	402	843488	1 - 1341	15 - 1355	AV700498, BG164166, AV700988, AV700545, AL037632, AV762783, BG260565, AV714931, AV760723, AF074667, BF792326, AF034176, BE796439, AW962035, AW976010, AA524604, AV760360, BE541237, AU118837, AV719941, BF678427, AL138265, AW188427, AV733710, AL048626, AU117926, BE909125, AV764490, AU119532, BE067011, AL534817, AV699709, AV686853, AV722030, BE393367, BE538259, AA708751, AI732911, BF346320, AW970915, AA526787, AW131249, AU147226, AV763174, AV760497, BF805173, BF968141, AV762900, AV759711, AV759356, AV760364, BF307044, AV762902, BF679169, AV759686, AV762779, AW963982, AL042906, AV759684, AV762001, AV759683, AL135377, AV734543, AW408643, AU155227, AV759046, AA601355, BF913258, BE273856, AL044340, AA081138, AI952885, AA584482, AV734401, AL042905, AV722075, AV737621, BF666736, AA211734, AW080062, AV762002, AV761309, AI791227, AW961160, AV763305, AI038990, AV759172, AW102955, AA708108, BF381650, BF828714, AI685198, AI679294, BE066950, AV763952, AA831913, AI679871, AU145521, AI204309, AW151713, AW069670, AA481760, BF892846, AW130036, AV763135, AU140392, AA284247, AW102811, AA722372, AW008212, AU158859, AA640277, U51704, AU155168, BG258140, AW088689, AU155048, AA577824, BE387734, BE867712, AL119123, AW079809, AA601326, BF968610, AA515829, AC008440.8, AC011531.7, AC002302.1, AC027319.5, AC005484.2, AC005972.1, AC010469.7, AL109743.4, AC005077.5, AL035398.19, AC020916.7, AC022211.5, AC002301.1, AC018808.4, AP001711.1, AC008745.6, AC000052.16, AL035587.5, AC008720.6, AC007421.12, AC003101.1, AC034193.4, AC025593.5, AC006511.5, AF045555.1, AC007374.6, AL096814.26, AC005081.3, AL445685.17, AJ400877.1, AC004985.2, AC020558.4, AC009516.19, AC008443.8, AL031447.4, AC006028.3, AL121992.24, AC011465.4, AC008655.6, AC008616.6, AL135928.6, AL513550.9, AL031295.1, AL050335.32, AL049780.4, AC005052.2, AL390060.14, AC011005.7, AP001717.1, AB023049.1, AC007000.2, U82668.1, AC005840.2, AC006530.4, AF111168.2, AC018809.4, AC002477.1, AC011443.6, AC018751.30, AC008622.5, AC023058.17, L78833.1, AC007956.5, Z85986.1, AC072052.6, AL137067.7, AC018635.6, AC002059.3, AC004824.3, AC026172.3, AC018506.4, AP000116.1, AL135927.14, AC007227.3, AL445248.7, AL590763.1, AC005914.1, AP001727.1, AL158207.15, AC010320.9, AP000557.2, AL050318.13, AL139809.16, AC008764.7, AC004882.2, AC007731.14, AJ312686.1,

					AC008969.5, AC004965.2, AC005037.2, AC000353.27, AC027130.5, AC087590.1, AL513008.14, AC005520.2, AC005088.2, AL133244.1, AC008551.5, AL109976.23, AC011461.4, AL132639.4, AC005089.2, AC010492.7, AC009244.24, AC006930.1, AC007318.4, AC005098.2, AC005399.19, AC005529.7, AC004859.2, AL031584.1, AL160471.5, AL391139.19, AF111169.2, AL133448.4, AL451125.7, AP001670.1, AC011890.4, AC005231.2, AF030453.1, AC010527.5, AL034420.16, AC009247.12, AC010328.4, AC073657.5, AC006120.1, AL117692.5, AP000512.1, AL161452.19, AC022382.3, AL445435.11, AC005722.1, AC005632.2, AL162426.20, AL138721.16, AL163636.6, AL049766.14, AL137792.11, AL391827.18, AC004815.2, AL135901.23, AC020983.7, AC021036.5, AL162724.16, AL590762.1, AC011500.7, AC005736.1, AL022312.7, AP003357.2, AL158830.17, AC004089.25, AC006538.1, AP000212.1, AC008760.6, AL450226.1, AL163249.2, AC009002.5, AL121658.2, AF200465.1, AC025438.5, AC091118.2, AC008736.6, AL121601.13, AC004583.1, AC019205.4, AC010326.6, AC007676.19, AC018638.5, AC008755.6, AF001549.1, AC003109.1, AC009194.8, AL021578.4, AF064861.1, AC011247.10, AL354808.24, AP001718.1, AL355480.22, AC005015.2, AL079335.29, AC002299.1, AL035086.12, AC005368.1, AL357515.26, AF168787.1, AC074270.25, Z95152.1, AC002470.17, AP001752.1, AC005070.1, AC005332.1, AC005619.1, AC010458.5, AF196779.1, AC006285.11, AC010422.7, AC010463.6, AC004813.2, AC024561.4, AC007097.4, AC005280.3, AL096701.14, AC002985.1, AC007957.36, AL034379.8, AC004257.1, AL033529.25, AL359092.14, Z93023.1, AP001725.1, AL357560.11, AC022261.8, AL031681.16, AC025166.7, AC007999.12, AC005874.3, AF134471.1, AC016025.12, AC006254.10, AC004148.1, U95742.1, AC026464.6, AC011462.4, AC005821.1, AC003110.1, AC009756.9, AC011442.5, U78027.1, AC007619.22, AC010605.4, AL117344.12, AL121975.9, AL136300.22, AC006337.4, AL157838.24, AL158040.13, AC006970.6, AC007488.15, AC000026.3, AC008687.4, AC018720.5, Z84487.2, AL445222.9, AL132855.4, AC006480.3, AL031286.1, AC004906.3, AF196971.1, Z83843.1, AC003043.1.
HNHOG73	403	835026	1 - 788	15 - 802	AA584096, BF853760, AL137798.8, AL049569.13, AL137802.7.
HNHPD10	404	834927	1 - 926	15 - 940	
HNTBI57	405	570877	1 - 1351	15 - 1365	AL528725, AL517370, AL525337, AL528721, AL517371, BF688870, AL528722, AL528048, BE799446, BF980673, BE735750, BF025756, BG260476, BE799805, BE736521, BF026765, BF688394, BG165306, BE904284, BG105071, BE259792, BE791234, AV706017, BE266425, BF220099, BE513467, AW009838, BE251361, AW248475, BF984306, BE390525, BF315816, AW248520, AI817167, AW956166, AW149722, BE410046, BG235966, AI188457, BE300532, AW005514, AI124027, BE220534, AI923575, AW471497, AW473722, AI366112, AW104750, AI480234, AA452511, AI696876, AW964824, AL110339, AI804579, BE540036, BE253483, AA740396, AW000853, AI091327, AA452655, AI184221, AA864258, AI192782, BE258188, AI636166, AA402090, AW405644, AI289600, AI299237, AI309629, AI923569, AA450027, BE168977, AA829783, AA505829, BE837825, AW129039, AI802674, BE255478, AA359415, AA373622, AA335352, N27053, BF915342, AA454095, AA852853, AA149479, AA341041, AI523984, BF920668,

						AW517023, AA338985, AA033605, AA359435, AW247428, BE169006, BF108984, AI864722, AW247387, BF111419, AV704626, AW732331, AA825440, BE168970, AI983715, AW878738, BE302856, T24108, AI979211, AW992807, AW863091, AW878649, BE241911, AA852854, BG005253, AW271173, F26257, BE048939, AF104222.1, BC000495.1, BC001947.1, AC006529.1, AB033004. 1.
HNTCE26	406	116039 5	1 - 2149	15 - 2163		BG252201, AV726464, AL529709, BE894106, AV726994, BF970560, BF132059, BF977798, AI703275, AW512938, BG164577, AL529708, AI767521, AI823746, BE220262, AA583438, AI143608, AW468337, AI949854, AV727138, AI620344, AI209187, AI630993, BG007081, AI004986, AI565892, AV715169, AI367983, BF056815, AW394003, R70620, BG007658, AI152183, BF381743, AA565300, AA088574, AA931697, AA995899, AI025252, AA297479, T84083, AW138535, H71679, Z45535, AA297478, AI865989, AA367654, AA150060, AA044326, AW338484, D29436, R24591, AI005551, H00983, H39751, AI669105, T83438, BF091777, AW138127, R21165, BF083909, BE934286, R76620, AA971307, AA745052, AW945769, AI554153, T84151, BE550213, H01724, AW051517, AW373316, AW373313, T89390, BF083903, BE541509, AA180271, AI263504, AF303588.1, AF140242.1, AL133390.7, AF056032. 1.
HNTNC20	407	700627	1 - 1965	15 - 1979		BG179496, BG254440, AA573206, AI735586, BE326906, AA131359, BF668303, AI522318, AI376670, AW241377, BE350501, AA452451, AA131240, AW242329, AI540415.
HNTNI01	408	135228 5	1 - 2073	15 - 2087		AA447485, AA196688, M86015, AI750365, I13985, BF356780, N28763, AC005028. 1.
HNTSY18	409	104138 3	1 - 1797	15 - 1811		AW470226, BF058886, AI692966, BF058139, BE218656, AI281699, AI241829, AA613450, AC004877.1, AL137162.25, AJ400879.1, AC011551. 3.
HOAAC90	410	130120 2	1 - 628	15 - 642		BF508077.
HOACB38	411	520201	1 - 592	15 - 606		AI439525, AA493464, AI348780, AA653139, AW502688, AA689351, AI887235, AI570067, AW813106, AC069262.24, AC007421.12, AL354735.14, AC004382.1, AC009131.6, AC090939.1, AP000359.1, Z86090.10, AP001748.1, AL049843.18, AL021391.2, AC015801.25, AL133243.1, AD000092.1, AJ003147.1, AF243527.1, AC004125.1, AC007991.7, AL035086.12, AP001724.1, AC006038.2, AL121886.22, AL133448.4, AC007981.46, AC005207.1, AL359853.18, AC002477.1, AF205588.1, AC013429.12, AL121809.6, AC004980.4, AI229041.1, AC002430.1, AC011475.6, AC009123.6, AC008521.5, AC009506.5, AL139099.2, AF207550.1, AE000661.1, AC006141.2, AC010412.7, AC007899.3, AC005746.1, AP002360.4, AL359751.12, AC011811.42, AL158207.15, AC009144.5, AC007954.7, AL136179.15, AC000353.27, AC010319.7, AC039057.8, AC008044.4, AC005332.1, AC020552.4, AC008569.6, AC007064.27, AL138752.5, AL049830.3, AC015971.4, AC026749.5, AC016637.6, AC008567.4, AL354932.26, AC008891.7, AC011247.10, AL357515.26, AL139316.5, AC018644.6, AC012170.6, U91323.1, AL121992.24, AF258545.2, AL133370.4, AL020997.1, AL163201.2, AC008403.6, AC004816.1, AF168787.1, AC005522.2, AC027319.5, AC007384.3, AP001630.1, AC013717.8, Z95114.19, AL009181.1, AL161436.12, AL133367.4,

					AC021036.5, AC011442.5, AP001711.1, AL356379.10, AL390239.16, AL031281.6, AC012594.7, AE000658.1, AL139353.3, AL050335.32, AF190461.1, AL513008.14, AL353643.10, AC002347.1, AP000513.1, AC020934.7, AL356481.16, AC011455.6, AC018755.3, AC011500.7, AF038458.1, AL137802.7, AC004913.2, AP002852.3, AF001549.1, AC006329.5, AB023049.1, AC005899.1, AL160411.25, AC006315.2, AC009060.7, AL356575.8, AL008718.23, AC005529.7, AL121924.13, AL355343.18, AC004050.1, AC008155.9, AC009086.5, AL117692.5, AC020915.6, AC009116.7, AL020993.1, AC024563.4, AL034420.16, AL109935.39, AL355512.22, AE006462.1, AC020558.4, AC010378.6, AC004000.1, AC009497.3, AF064861.1, AC040160.4, AL139100.9, AC022410.4, AC011445.6, AL133288.12, AC025593.5, AL391987.15, AL034380.26, AL121972.17, AC068640.29, AL135927.14, AL139385.12, Z97056.1, AC000120.1, AC004019.20, AC011742. 3.
HOCNF19	412	835049	1 - 1104	15 - 1118	F02459, Z17835, A1264655, BE011950, AV729096, N77968, BF807259, AA658839, A1076081, AW804948, BF987026, AC008078.11, AP002898.1, AL157369.7, AP002392.3, AC010999.6, AL353581.14, AC007383.4, AL133551.13, AL161659.17, AL132772.14, L81392.1, L81391.1, AC005317. 1.
HODDF13	413	684307	1 - 816	15 - 830	AC011245.8.
HODDN65	414	520348	1 - 741	15 - 755	BF526964, AV734149, AV760019, A1246796, BE063437, AL135377, A1061313, AA515048, AW274191, A1306232, AL046519, A1251576, A1248050, BF828714, A1311647, AW973992, BF826830, A1207465, AW505253, BF340002, AA303007, AW243793, AA704393, T05118, A1583466, AA504818, T74524, AW855643, AW468048, AA737309, AW732205, A1270177, BF821897, AV755654, AW504168, BG222813, AW965008, A1085242, AW516080, AW500684, AL079734, BE077105, A1380617, A1499954, BE062478, AW237905, AA806804, AA484201, BE148969, AV703187, A1612142, BF724699, AA513551, AA730305, AA515728, AW970940, A1491755, BE301584, AW963444, A1192440, A1053827, AV741663, AA524616, AA515723, AW975626, AA827383, AA678950, BF447461, AW963463, BE138594, AA484366, A1610941, AA829036, BF811714, AW407632, AA569089, A1583252, AA502532, AW502873, BF990660, AW969941, AL046471, BF821009, AC006111.3, AP000553.1, AC004644.1, AL162551.3, AL356481.16, AC005225.2, AC005484.2, AC026230.5, AL354889.14, AC006483.3, AC005229.1, AB044947.1, AL138759.20, AC008102.17, Z84468.1, AC010202.6, AL022311.5, L78810.1, AC004851.2, AL008725.1, AC015550.18, AL359092.14, AF006501.4, AP000075.1, AL022165.1, AC010326.6, AC007151.2, AL031685.18, AC006974.2, AC011530.6, AC005821.1, AC011462.4, Z97876.1, AL049835.3, AL136160.18, AL122001.32, AC004448.2, AC009247.12, AC004686.1, AC010378.6, AC006388.3, AC010255.9, AC009311.3, AC004821.3, Z99716.4, AC005480.3, Z86090.10, AF279660.2, Z98044.13, AL133387.8, AL035462.21, AL049569.13, AC007249.5, AC010363.6, AC002400.1, AL109930.8, AL121675.36, AC018636.4, AC008641.6, AC008974.7, AL121845.20, U63630.3, AC002312.1, AJ003147.1, AC004234.1, AC090527.3, AC009077.7, AL035086.12, AC008072.3, AL031587.3, AC024093.46, AC007620.30, AC091529.1, AL109963.4, AC020901.8, AL133286.9, AC005077.5, AL359091.10, AC009812.17, AL049766.14, AC006077.1, AL022238.1,

					<p>AL137139.9, AF107885.2, AC068533.7, AP002085.1, AL136219.17, AL033529.25, AF254822.1, AC005793.1, AC004000.1, AC006480.3, AL445248.7, AC005089.2, D89013.1, AL034369.1, AC005071.2, AC011442.5, AC005940.3, AC008736.6, AL353701.15, AC004382.1, Z93015.9, AP001330.3, AC006312.8, AL034420.16, AP001748.1, AC005015.2, AL034424.9, AC006512.12, AP001629.1, AF001552.1, U08988.1, AL031847.17, AL136300.22, AC073542.4, AC005972.1, AC007739.2, AL023807.6, Z82215.1, AC011490.7, AL118501.22, AL022069.1, AP000065.1, AP001752.1, AC004971.3, AC006344.2, AC005098.2, AC000379.1, AC011811.42, AC004895.2, AL034380.26, AC004832.3, AC069272.18, AC002352.1, AC008760.6, AC010150.3, AL034421.7, AC008440.8, AC004876.2, AL109936.10, AL451075.15, AC073838.6, AJ278581.1, AC015853.8, AL135838.5, AC012384.16, AP001759.1, AC010519.6, AL163208.2, AC005971.5, AL031282.1, AC009086.5, AC007276.3, AL137072.8, AC008066.4, AB038653.1, AC004622.1, AL133480.9, AC013719.8, L78833.1, AC018462.4, AL020993.1, AC004542.1, AC004494.1, Z83838.2, AL512666.6, AC006549.28, AL109976.23, AP001767.4, AC006262.1, AC025207.5, AL022336.1, AC004966.2, AC011472.7, AL022322.1, AL138762.20, AL512347.14, AC006057.5, AC007384.3, AL161659.17, AL158052.10, AP001631.1, AP000555.1, AC008745.6, AL031727.42, AL391827.18, AL139415.10, AC008115.3, Z93023.1, AL096701.14, AL080317.11, AC004477.1, AL122020.5, AC010524.6, AL121899.37, AC012476.8, AL034562.3, AP001435.2, Z93241.11, AC005358.1, AC015982.9, AL513008.14, AC004867.5, Z82244.1, AC004797.1, AL121753.30, Z98949.1, AC005377.2, AC004143.1, AL353668.18, AF288742.1, AF190465.1, AC019155.4, AC016025.12, AL135901.23, AP001754.1, AP001728.1, AC009267.15, AC005488.2, AC003963.1, AC005602.1, AL133553.9, AC006449.19, AL035252.5, AP001610.1, AP002535.1, Z93244.1, AC002563.1, AL133174.15, AC008622.5, AL034417.14, AC011495.6, AC018695.6, AC009516.19, AC007676.19, AC004084.1, AL139809.16, AC008474.7, AL034548.25, AL031118.21, AP003352.2, AL137162.25, AL049829.4.</p>
HODDN92	415	422913	1 - 1925	15 - 1939	<p>BG116781, BG110501, BE150456, AI742087, AA453725, AI917507, AW769479, AI860142, BE326465, AI459289, AI860141, AW963123, BE646467, AA868553, AW872412, AW971193, AW277065, AI921333, BF576826, AI024689, BE466760, AI354470, AI005467, AW103830, BE045272, AI827987, AA442638, BF109829, AA813604, N28268, AA42648, AA563934, N63406, AA833517, AA663108, AA437299, AA632986, AA436880, N58885, AA812876, AA447794, AA442379, N58892, AW020895, AA522837, AA600372, AA229448, T78981, AA663178, AV693238, AI187977, AV696576, AI472712, AA229164, T85178, AW270324, AV683374, R64648, AA333708, AA703066, AW961515, BE093710, T78927, R64655, BF802058, R95914, T84294, AA551512, AA460220, AI916737, R31132, AA359583, AI217018, N56349, AI191725, BE835233, BE835385, T84796, AV741009, BE835410, AI084517, N83238, AW362842, AA247541, R31089, T91125, AA493776, BE818350, BE818352, AI253986, R31247, AW303285, N95696, BE708493, AA678297, AI003856, BE818343, N95562, AW024721, AA862707, N95587, AA401399, AA399957, AW511080, AL157879.7, AL021368.1, AL009030.15, AL049987.1, AL133255.13, AL390738.4.</p>
HODDO08	416	790333	1 - 1762	15 - 1776	<p>BF037067, BF690178, BF037467, BF690717, BE613160, BE262757, BF690612, AA878758,</p>

					AA910686, BF691447, BF038260, BE613000, BG169000, AA863301, BF897824, AA401453, BE265475, AW339332, BF897816, AA565753, AA551055, A1093151, AA099024, AA699676, AA133969, AA471069, A1693843, BF036820, BF196905, A1911997, A1924160, BF815573, BF897801, A1360309, BF432589, A1813844, AA504750, A1686753, A1806115, A1261776, A1310423, BF940128, AW403869, BE742893, AA134035, AA070230, AW117201, AW026697, AW197588, AW338979, A1123979, BG112376, N98997, AW583508, AA582249, A1654526, BF477527, BE964777, AW628128, AA223526, AA171790, AA971846, H73796, AA171423, A1147095, AA070339, AA693726, AA983737, AA678212, AA070177, AW674690, BF573100, A1085327, AA132700, AW268656, A1923994, A1418621, A1278584, A1248228, AA504652, AA780169, H73783, AA292088, AA693704, AW957393, A1418336, A1740694, A1868945, AA292108, BF964464, AA132811, BE620176, AA100497, A1302064, BF573156, A1039893, A1219311, BE567691, A1192239, AW247578, A1289150, A1564731, H80411, R55471, AA975469, A1494533, AW044091, A1948639, AA863079, W24068, A1061079, BE313730, A1305164, H16101, A1630630, R21932, BF573651, BG057973, A1283354, A1003108, AW999148, H16102, A1268012, R55472, N67966, AA363605, BF691459, BF038622, A1383210, A1350432, A1698241, AA098910, A1122984, AA011640, A1452472, AA070149, H96713, AA046634, BF903467, BG105768, BF762692, N51622, AA303985, AW149938, AA405427, AA121746, AA484923, D20184, H17092, H73784, AA484823, AA379017, AA346687, BF809804, AA371365, AA121692, AA370670, AA248199, AA011641, R05554, D80913, AW884514, AW166740, AA664999, BE961160, AA294828, BF812313, H73797, H80412, BF798512, R22581, AA046773, BE858968, BE812881, BE775032, D53438, BF511095, BE812879, AA716159, BF038847, AA975914, Z20288, AA345058, R05449, BE789328, AW969365, AW499915, BE898856, BE762335, AE938247, AW956340, BF689788, BF933273, AV685029, AW999572, BE313283, BE962739, AW999933, BF753569, BF753462, BE349202, AL035683.9, AL157838.24, AC007782.20, AC025594.5, AL031681.16, AC008073.4, AC027670.4, AC008745.6, AL096791.12, AL137786.2, AC006449.19, AL031587.3, AL033378. 12.
HODDW40	417	579256	1 - 668	15 - 682	AI915508, AC009116.7, AC004930. 1.
HODEJ32	418	835027	1 - 725	15 - 739	AI671275, Z69713. 2.
HODFN71	419	119486 6	1 - 1112	15 - 1126	
HODGE68	420	834907	1 - 837	15 - 851	AW812930, A1741403, A1193921, AA292663, AW812933, AV707090, BF892766, AA528261, AA513570, BE152032, AW812788, AL139296.4, AL355886.4, AL512449.6, AL360179.8, AC005284.1, AC011246.6, D84394.1, AC034245.4, AC012361.10, AL133373.5, AC027287.20, AL078634.24, AC012039.10, AB020863.1, AL158064.16, AL138758.7, AC034240.4, AL121575.24, AC016045.8, AL157819. 15.
HOEBK34	421	768325	1 - 733	15 - 747	BE463714, A1016683, AW779895, AA632933, BE180615, AL157827.17, AB011792. 1.
HOEBZ89	422	828177	1 - 2506	15 - 2520	BF685342, BG110312, BF685502, BE070832, AW177053, BF815287, BE300677, AW239056, AW750775, BE303001, AW852115, T85313, AW751809, A1783820, AA362844, AW795506,

	423	634994	1 - 1448	15 - 1462	<p>AW377523, T85527, AI090377, AA809125, AW504667, AW813589, AA831426, BF840290, AA533066, AA313025, AI924950, AW963489, AI754421, BF964936, AC010087.3, AL391137.11, AC090051.8, AC026866.8, AC004453.1, AL035089.21, AP000014.2, AC004491.1, AC018926.10, AF196779.1, AC006251.3, AC005670.1, AC003025.1, AP001169.1, AF139813.1, AC008134.3, AP001729.1, AC004228.2, AC006324.3, AL049713.20, AC000120.1, AL163249.2, Z84466.1, AP000501.1, AC008812.7, AL158210.12, AC004701.1, AL139021.6, AL139035.27, AL035460.15, AC020655.10, AC067941.7, AC003015.1, AC006464.3, AC026787.4, AC007006.3, AC023472.4, AC005736.1, Z99716.4, AL157702.10, AL031678.2, AP001858.4, AC016397.5, AL135752.6, AC018832.4, AL133466.22, AC005863.1, AC005837.1, AL162390.9, AC016772.8, AC007344.3, AC016691.10, AC012499.7, AL139350.17, AE000658.1, AF130247.2, AC004849.1, AC019050.4, AC007620.30, AL161731.20, AL049830.3, AC018764.6, AC022468.5, Z97196.1, AP001574.3, AL034402.9, AL158040.13, AC010002.6, AC005288.1, Z97055.1, AC011485.6, AL161935.10, AL356575.8, AL163206.2, AC009756.9, AC021188.6, AL355612.8, AL049795.20, AC004953.1, AC007533.2, AL121586.31, AC019041.8, AC011495.6, AC006312.8, AC068466.4, AC009961.11, AL022576.1, AC012039.10, AC011455.6, AP002812.3, AL451086.6, AL390882.12, AL138758.7, AL139113.21, AL133367.4, AL109743.4, AC005730.1, AC026431.3, AL121582.19, AL117381.32, AC007679.4, AL513008.14, AL162426. 20.</p>
HOEDB32	423	634994	1 - 1448	15 - 1462	<p>BE728085, BF525463, AL043598, BE379024, BE729709, BE388931, BF058202, BE389160, BF219910, AA937045, BE888648, BF983683, BF058514, BE729777, BE386542, BE270287, BF220144, BF732488, BF205132, N37022, AI806995, BE302761, AI218926, AI040017, AV700992, BF204637, AW269653, AW664365, BF851636, AA558441, AI971923, BE389935, AI971822, AI984087, BF109553, BE149505, AI371806, BE466285, N63999, AI218921, BE896831, AW105333, AW264122, H97490, BF830445, AW410288, AW856197, AI041603, AW469216, N28797, BE379424, AW662759, AI218000, AI283819, AA789225, AA916425, W67366, AI354311, AW517796, AI343922, AA872912, BE207555, AW410287, AI751344, AI537028, AW379887, AI469495, N23215, AA305895, AV700226, AI399649, AW602751, AI857609, BF832669, BF738545, BF732356, AW960917, W67367, AI093054, AW132083, AA613324, AI220983, AW241183, AJ239424, AW876666, N32087, AI126987, AA722964, BF361409, AI312696, AI193728, H93764, W24695, H11009, AW876671, BF515670, AA166810, AI754948, AA166918, N93890, N93062, H92111, AI208255, AA994700, AA341436, AL043597, AI751345, T58592, R57961, BF929058, AI015141, AA375135, C01839, H14764, AW889983, DI2283, BF755440, H06898, AI868297, AA594530, AA303707, AA535409, AA373071, AA885934, AA359174, AI280938, D83887, AW889975, N88528, BE673462, AA341295, BF088497, AA090557, H06857, BF512261, BC000526.1, AL117619.1, AF132000.1, AC003687.1, AL049873.3, AL450324. 10.</p>
HOEDE28	424	103648 0	1 - 1621	15 - 1635	<p>BG253644, BE617308, BE908205, BG168469, BE780471, BE962197, BE906067, BF9995657, BE909860, AI807170, BF663899, BG119980, BF590292, AW245652, AI925873, AW369626, BE327306, AW835320, AI249748, BE222879, AA829645, N64725, AA921828, BF877027, AI858022,</p>

HOEDH84	425	748236	1 - 2065	15 - 2079	<p>AI284125, AW188200, BF343620, BG058575, AW389738, AA308577, AI373933, AW058649, AA827526, AI480003, AI735476, AI088741, BF436493, AW897913, AI417852, AA494550, AW897907, AW338942, BF342403, AA994956, AA405790, AW514957, AI262527, AA494492, AI636409, AI434947, BE049371, BE905083, BG260598, T79610, AA962509, AW167441, AA405896, AW081192, D60231, AI278362, AI554143, AW188080, D81165, BE311649, H30174, AI243196, AA079581, AA740371, BG012145, AA972847, AI306626, AA593832, AW194277, AI351091, AA079481, AA034389, T53345, H28288, AA938450, AA293300, AI926625, BF993722, AA292019, AA258528, AI583396, AI276415, AA328961, H91077, AW363333, AW951949, BF992981, BF836627, H54397, BE041571, AW514433, BF945592, R97080, BF847325, H23972, BE302217, AW591181, R97126, BF945597, R75916, BE162162, AA704066, T53344, R48633, C06420, H91377, H15782, BF946082, N91739, AA323512, H54481, AA634725, AA366052, AI572758, BF943993, BF725666, H15781, AI863929, AI299302, BG010488, BE091179, C15317, BF992401, BE170194, AI783464, BF992478, AI985743, C15316, AA534183, AI918432, BE931309, D80793, AA767106, BF089135, AW879610, AI934252, BF089141, BF089154, BF089155, BF941774, AA258372, BG248087, AI383014, AW366744, AA034388, BE702368, AI364001, BF768284, AW601301, BG035284, AW997179, AW873693, BE706964, AW769571, AW245910, AW798864, BG253858, AK027083.1, AK026108.1, AB051532.1, AL390081.1, AL390080.1, AL390082.1, AK026133. 1.</p> <p>BF349611, BE144240, BE144306, AW665086, BE908446, BE673358, BF437802, AI656054, AI741880, AW072783, AA670023, AW205477, AI453672, BF063715, AA603812, BE858966, AA885145, BF091278, AI766417, AA116081, AA043201, BF060900, BE937827, AA583974, AP000577. 4.</p> <p>BF059271, AW173055, AV682872, AI819334, AW593727, AI742596, BE775300, AI825353, AW291804, BE464469, AW291769, AI365110, AI760371, AI339112, AI439770, AI338579, AI091836, AI193821, AA242981, AA836083, AA769364, AI964079, AW978535, AV748559, AA252166, AA873645, T84143, H51863, AI453360, C00241, BF516266, AW628246, AW628281, AA831298, N53279, AW291086, T89383, AB023143.1, AF310105.1, AF229059.1, AF229061.1, AF298548.1, AL117470.1, AF229060.1, AF229062.1, AK026393.1, AK026398.1, AF241727.1, AF241726.1, AC007041. 3.</p>
HOEFV61	426	833079	1 - 2643	15 - 2657	<p>AL528504, AU121718, AI820674, T94707, AJ224741.1, Y13341.1, AC079145.3, AJ001047. 1.</p>
HOFMQ33	427	118446 5	1 - 2396	15 - 2410	
HOFMT75	428	911180	1 - 2117	15 - 2131	<p>AL532142, BG260401, BF688316, BF796465, BE907259, BE878185, BF311180, BF182869, BF793219, BF528084, BG164901, BF025894, BF343463, BF027348, BE615276, BF339485, BG251657, BF340866, BE869513, BG168879, BF312304, BF344218, BG035574, BE909308, BF317451, BF346215, BF569244, BF569508, BF341893, BG164819, BG251015, BE876727, BE314260, AU119847, AW732268, AV691326, BF346288, BE907910, BE792057, BF314016, BE386414, BE787546, BF337708, BE384083, BF032872, BF308223, BF982476, BF313919, BF967499, BE272948, BE878890, BE272586, BE878055, BF53224, BE386215, BG035861, BF686718,</p>

					BF569555, BE907675, AL036113, BE262510, BE261041, BG114738, BF315298, AU141949, BG171668, BE383392, BE906327, BF316184, BF846927, BE871813, BE780677, BE266551, BF316458, BE793972, BE870259, A1869324, BG171700, BG251535, BE302664, BE261412, BE905686, BF314291, BF528326, BE018644, BF846926, BF338012, BF344721, BE170034, BE797588, BF725914, BF313723, BE295702, BE539065, BE789580, BF526208, BE547474, AA433879, BF312413, BE735885, BE260798, BF724105, AW601604, BF724433, BE736776, BF314509, BE906884, AL526830, AW068684, BF312224, BF807244, BE890682, AL045190, BF344403, AW239170, BG165173, BE382506, BF872251, BE909949, AW630822, N20475, BF026564, BG178360, BE294687, BE867221, AW403966, BE392521, BE167525, BF985419, AW179034, BF872266, BF743019, AW239410, AW375966, BE277237, BE276165, BE276172, AW402407, BE543928, BE062186, BF378665, BF087437, BF880137, BE567147, BE938659, BE617502, AW067770, BF868761, BE336783, BE312715, AA057554, BG004418, BF985426, AW841776, BF851414, BF872268, AA410697, BE908992, BF883702, BE538481, AW884175, A1752785, BE542584, BG168264, BF883546, AW067904, AW068103, BE697629, BE697634, BF764898, BF870917, AW797744, R88501, AA074710, BE697637, BE717209, BF761588, H10878, BG164643, A1868439, AA603295, BF125971, A1751896, BF063288, BF846855, BG116325, BE174856, BF880542, BF304390, BE875185, A1909381, AW889411, BE796125, BF724712, R87863, BF817489, BG167275, BF380296, BF087740, BE006180, BF087690, BE075860, BE75860, BE905813, AA852669, R88022, BF087652, BF087788, R87854, BF815395, BF354394, BE932097, F05545, BE707522, AW372168, M11233.1, X05344.1, M63138.1, M63135.1, M63136.1, BC008983.1, AK024538.1, AK026534.1, BC008382.1, AB056768.1, AK026592.1, AF090900.1, AK027204.1, AK026464.1, AK000432.1, BC004370.1, U39656.1, AB063008.1, AL080060.1, AL122098.1, AB063084.1, AL080127.1, AL136768.1, AK026452.1, AL390167.1, AF348209.1, AL353625.5, AF078844.1, AK027116.1, AL050393.1, AL512718.1, Z82022.1, AL080137.1, AK026551.1, AF271350.1, AL122121.1, BC005890.1, BC003687.1, BC006164.1, AK026045.1, BC004951.1, AF177336.1, AL117585.1, AL050108.1, AL136799.1, AL050138.1, AK026865.1, AL133104.1, AL512719.1, AK024524.1, AB056420.1, AF207829.1, AB063079.1, AL110221.1, AK024588.1, AK026542.1, AK000137.1, AL049464.1, AL359618.1, AL050277.1, BC004958.1, BC008387.1, AK025524.1, AK026532.1, BC008488.1, AL442072.1, AK000718.1, AK026408.1, AK000652.1, AL049466.1, BC009033.1, AK000647.1, AL389978.1, AF217966.1, AK026583.1, AK026642.1, AL049382.1, X69819.1, BC006807.1, BC001349.1, BC008485.1, BC007198.1, AF090901.1, AL133072.1, AL136787.1, AF104032.1, X72889.1, AF003737.1, BC008070.1, AK026480.1, AL512684.1, AL080159.1, AL133640.1, AB060883.1, BC005678.1, AK025958.1, AK000486.1, AK025092.1, BC001045.1, AL136915.1, AK025632.1, AL133016.1, AK025254.1, AK000323.1, AL157431.1, AF146568.1, AL133565.1, AB019565.1, AL136805.1, AL136864.1, AL162008.1, AL512733.1, AB060825.1, AL359615.1, AL359620.1, AL136928.1, AL359941.1, AB048964.1, AF218014.1, BC005168.1, AL080124.1, AB052191.1, BC003683.1, AK026947.1, AL133093.1, BC008417.1, AK026597.1, AK025414.1,
--	--	--	--	--	--

						<p>S78214.1, AB060916.1, AL050146.1, AK026608.1, AB060852.1, AL162062.1, AF125948.1, AK026593.1, BC009341.1, AL136892.1, BC008280.1, AJ012755.1, AL137556.1, AF090934.1, Y16645.1, AK026629.1, AF090943.1, AK026528.1, AL050024.1, BC002839.1, AL110196.1, AL512761.1, AB047615.1, AF225424.1, AL359596.1, AL050172.1, AB055366.1, AB060929.1, AL137538.1, AK027164.1, AK026630.1, AL136843.1, AB055303.1, AB060887.1, AK025312.1, BC003684.1, AK025772.1, AK025484.1, AL136586.1, U80742.1, AL137463.1, X65873.1, AF111112.1, AL389982.1, AL162002.1, AF162270.1, AK027113.1, AL122049.1, AK026086.1, AL122050.1, AK025906.1, AL512754.1, AB055374.1, AB050534.1, AL359583.1, AB056421.1, AL136844.1, AK025209.1, AL137271.1, AL512746.1, AB047801.1, AB062938.1, AL133557.1, AL133075.1, Y14314.1, AB049758.1, AL096744.1, AL133077.1, AL133014.1, BC008365.1, AL133113.1, AL137527.1, BC006412.1, AF106862.1, BC006195.1, AB051158.1, AB055361.1, AK026855.1, AL389939.1, AL442082.1, AF183393.1, BC007021.1, AF125949.1, AB055315.1, BC007326.1, AK026533.1, AB060912.1, AL049452.1, AK026504.1, AK026526.1, BC005151.1, AB048953.1, AL137550.1, AB063070.1, AB047904.1, AB056427.1, AL049314.1, AL117583.1.</p>
HOFNC14	429	135237 8	1 - 2780	15 - 2794		
HOFND85	430	847424	1 - 2034	15 - 2048		<p>BG252755, R14839, R14808, AL526882, H17173, BF361444, AI075929, BE883297, AC005754.1, AK024641.1, AF152500.1, AF217750.1, AC025436.2, AC005752.1, AC008688.7, AF152495.1, AF217756.1, AF152493.1, AF217744.1, AF217748.1, AF152489.1, AF152502.2, AF217749.1, AF152496.1, AF217755.1, AF152491.1, AF217746.1, AF152494.1, AF217742.1, AF152490.1, AF217747.1, AF282973.1, AF152497.1, AF217754.1, AF217757.1, AC074130.3, AB046841.1, AY013878.1, AF152501.2, AF152527.1, AF217751.1, AK027526.1, AF152498.1, AF217753.1, AL117449.1, BC001186.1, AF152499.1, AF217752.1, AF152528.1, AF217743.1, AF152492.1, AF217745.1, AK021915.1, AK023190.1, AY013876.1, AF329369.1, AF131761.1.</p>
HOFNY91	431	847425	1 - 2392	15 - 2406		<p>AL529530, BE896219, BE905006, BF701370, AV726968, BF697098, D56471, AA398982, D54791, AW952054, D54998, AA137223, D52957, AL529529, BF667411, AV722244, BE539516, AW603940, BG252620, R33682, D53702, AL537902, BG171582, AW752566, BE874188, R79409, BE891332, BE888598, BG180774, AA702285, D52438, AA306169, F00618, M78614, AW965817, BF515338, BF091420, AW847750, AA307191, AA446770, BE785930, AW157201, AW801965, BF031768, T31797, BF031629, AA658190, D52945, BE565940, AA157919, AA136378, AA150656, AW162647, AA282187, AI684319, BE540207, BF028795, H22397, AW847690, AW293605, AI457838, AA938423, T36093, BE878093, T30493, BG251689, BF341242, AW847685, BG169305, BF115649, BG166888, AV727838, BE739764, BF207904, BE738987, AV725549, AV726582, BE865924, BE866601, BE811512, BF028097, BF028440, AA155611, BF030153, AW070701, AA357234, D55509, BF028402, BF208666, BG054885, BF947687, AW997229, BE699329, BG164817, AV727582, AW750879, BG258115, BF444690, BG151519, BF001920, AW300512, AA639868, AA256021, W23904, BE866188, AI925691, R56031, AW379828, H08997, AI904379, AI632020, AW029553, AI950933,</p>

					BG104880, AA828915, AI904416, AI986473, BF131266, BF388526, BF433181, AI125136, BF476107, AW770808, AA399621, AW801803, AI978599, AI700677, BE184726, BE184725, R35739, N52155, AB024334.1, AK024230.1, AC006388. 3.
HOFOC33	432	118615 6	1 - 1655	15 - 1669	AL537523, AL529922, AL531958, AL531931, AL533269, AL531527, AL538370, AL522567, AL533700, AL517522, AL533444, AL532715, AL533022, AL535485, AL537167, AL534487, AL533896, AL535844, AL531994, AL536379, AL532803, AL536823, AL533869, AL532035, AL532179, AL519275, BE740244, AL533860, AL515038, AL533553, AL537985, AL532900, BF343282, AL533210, BF337581, AU117341, AL533099, BE746016, BF337686, BF792204, BF342077, BF525414, BF337225, BF526535, BF339813, BE746023, BF034576, BF725426, BF338260, BF530938, AL037604, BF526573, BF725182, BF526739, BF339663, BF347697, BF526503, BF525581, BF340234, BF338170, BF342084, BF343151, BE745055, BF330924, BF337272, BF343688, BF337021, BF970778, AL537984, BF341103, BF526677, BF338545, BF337395, BF342649, BF526859, BF340775, BF339935, BF526834, BF341477, BF344385, BF340877, BF342826, BF342633, BE736016, BF344578, BF525970, BF342467, BF343650, BF342924, BF340763, BF339538, BE544737, BE908437, BF341003, BF343078, AI207781, BF340051, BF525585, AL522566, BF338449, BE745373, BF337096, BF526010, BF341476, BF967360, BF338852, BF341124, BF338195, BF526745, BF342954, BF339763, BF979514, BE746698, BF339517, BF342360, BF340469, BF339191, BF339887, BF342928, BF341735, BF529338, BE743894, BE908818, BF525856, BF344911, BF338535, BF339332, AL532657, AL531957, BF344107, BF341131, AV723493, BF341782, BF344167, BF339580, BG109919, AW239295, BF528683, BF341918, BF344021, BF343832, BF337793, BF338946, BF338120, AL534486, BF338028, BF340384, BF344732, BF339317, BF341212, BF340817, BF340783, BF343389, AU119892, BF345257, BF340999, BF344258, BF337576, BF344566, BF034877, BF337121, BG170540, BF343271, BF525368, BF339535, BF339226, AV726914, AV727031, BF344177, BF339897, BG163685, AL047863, BF525437, BF525698, BF526269, BF343536, BF343386, BF339198, BF344902, BF526798, BF341498, BF526748, BF341312, AL046091, BF338378, BF342068, BF525844, BF338401, BF526779, BF341154, BF343100, BF342333, BF344867, BF342713, BF526050, BF724784, BF339951, BF340867, BF725357, BF346960, BF342297, BF343041, BF526463, BF341712, BF340168, BF526158, AV691679, BF344920, BE872649, AL519274, BF338219, BF338938, AL533236, BF339512, BF525910, BF339243, BF337714, BF341591, AL041191, BF343646, BG180665, BF525981, BF337030, AL048826, BF340588, AV722425, BF529059, BF526688, AL533699, BF724267, BE745203, BF724793, BF339189, AV684138, AV752186, AV655939, BF343922, BF920088, BF340673, BF340571, BF338384, BF337619, AL043008, BF339850, BF337433, BF526888, BF919959, M64722.1, X14723.1, M25915.1, J02908.1, M74816.1, L00974.1, M63378.1, Y09532.1, M26639.1, M63377. 1.
HOFOC73	433	931871	1 - 1477	15 - 1491	BF195687, AI762843, BF435173, AW167715, BE675436, AI829951, BF195590, AW517368, AI831464, BF110813, BF939079, AW573230, BE747230, AI760936, BF348602, AA418800, AI870845, AI420441, AI377190, BF196297, N32270, AI813507, AI313119, AI472198, AI340272,

AA502942, AI363372, AI806717, AI479956, AA861188, AI073435, AI128897, AI799480, N35138, AA832426, AW753935, AA421515, AW362239, AA258517, AI907351, AA789084, BF924856, H42825, F35882, BF814541, AW409775, AW265004, AA830821, AW089179, AL133741, AA835966, BG029053, BE781369, AI696969, AI565172, AW089006, BE965169, BF527012, AA807088, BE048071, AI567637, AW088899, AI571868, BF725863, BF970263, AI244380, AL119791, BG058039, AW020419, BE964497, AW999906, BE785868, AI400725, AL046463, AI874166, AI922577, AI874151, AW081034, AI620093, AI282903, AI280661, AW193203, AA603709, AI570966, BG260144, BE061389, AI537617, AI919345, BG027628, AW130863, BF915537, AW834355, BF815196, AI648567, BE963918, BF915208, BE072233, AI952302, AI805638, AI366549, AI636719, AI539153, BE964767, AW085786, BE538466, BF904180, BE172499, BE963286, AL036638, AI857760, AA568405, AI611743, AI689420, AW083804, AI696626, AI633477, AV757067, AI589993, AI365256, T99953, BG105895, AL038505, BF814449, AW022682, BE393551, AA464646, AI963062, BF817746, AI886055, AI472536, AI677797, AW999599, AF009923.1, AL109840.24, AC010102.3, BC008142.1, AF136273.1, AF032906.1, AF136275.1, AL389978.1, BC004874.1, AK024538.1, AK025383.1, AK000137.1, AB063079.1, AL359600.1, BC004265.1, AF069506.1, BC009253.1, AF262032.1, AB063074.1, AF188698.1, BC007355.1, AK000421.1, AF069506.1, BC009253.1, BC008382.1, BC004908.1, AL359620.1, AK027868.1, BC007456.1, J05032.1, AF090886.1, AL137292.1, BC002454.1, AB063008.1, BC001045.1, AL133016.1, AF078844.1, BC004529.1, BC007255.1, BC008488.1, AF125949.1, BC000556.1, BC008893.1, AL080060.1, AL049382.1, BC007534.1, AL389935.1, AB019565.1, BC005007.1, AK025708.1, AL162006.1, U42031.1, AL096751.1, BC007389.1, AL136692.1, AL050277.1, AK512719.1, AF067420.1, BC005678.1, AK024588.1, BC003650.1, AK024601.1, AL122111.1, AB048975.1, AK000647.1, BC003548.1, AL137521.1, U91329.1, AL137665.1, AL117432.1, AF271350.1, AL133104.1, AL110196.1, AK000445.1, AF218014.1, BC006164.1, AK026522.1, AK026626.1, AL133081.1, AK025958.1, AF217987.1, AB048974.1, BC000316.1, AK027164.1, AL117457.1, AB062978.1, AL137300.1, AB056768.1, U77594.1, U39656.1, BC004370.1, AB049848.1, AK000652.1, AL512754.1, AB056427.1, AB060211.1, BC008785.1, BC003682.1, BC008417.1, AK000753.1, BC008282.1, AL133014.1, BC006201.1, BC006412.1, S76508.1, AF081197.1, AF081195.1, BC003687.1, AF239683.1, AF348209.1, AL353625.5, AL117648.1, AL137429.1, AK026533.1, AK026504.1, BC006508.1, AL512761.1, AF305835.1, AB049758.1, AF217991.1, AL122121.1, BC006133.1, BC005835.1, AF091084.1, AF162270.1, AF159141.1, AK026642.1, AB060905.1, AB056421.1, AK024974.1, AK027081.1, M92439.1, AL390167.1, AL080086.1, AL080074.1, BC000550.1, BC002647.1, AB063070.1, AK000432.1, BC003602.1, AB050510.1, BC007391.1, BC008673.1, AK026526.1, AB060852.1, AF303581.1, AF178432.1, AL136586.1, AL389939.1, AJ006417.1, AK026353.1, AB047615.1, AB047897.1, BC008040.1, BC008280.1, AK025573.1, AF219137.1, AL110221.1, BC007998.1, AL442072.1, AL137527.1, AL050393.1, AK000450.1, BC000348.1, AK026591.1, AL136790.1, AC006451.5, AF012536.1, AL049460.1, BC007280.1, AF218031.1,				
--	--	--	--	--

					AL133645.1, AK025375.1, AK025541.1, AB063084.1, AK026452.1, U00686.1, AF040751.1, S77771.1, BC008025.1, AL080137.1, AL049465.1, BC000785.1, AK024546.1, AF000145.1, AL137537.1, BC004533.1, AK027116.1, BC003052.1, AK024524.1, BC006210.1, BC005858.1, AK026086.1, AB047887.1, AB060837.1, AK027161.1, AK026647.1, AK026947.1, AB060929.1, BC008485.1, AL122098.1, AL080158.1, AB056809.1, S69510.1, BC004244.1, BC007346.1, AL1359618.1, X65873.1, S78214.1, BC006195.1, AK026600.1, BC008455.1, AL080124.1, AL137463.1, S61953.1, BC008780.1, BC007326.1, AL122049.1, AL137526.1, AL136767.1, BC009403.1, AK000391.1, AB048964.1, AK025391.1, AK026528.1, AF245044.1, AK026597.1, AL122050.1, BC008899.1, AK026855.1, BC001967.1, AK026164.1, AF225424.1, AB047941.1, X69819.1, AK026959.1, AL117583.1, AL136844.1, AL133098.1, AK027182.1, AL1512746.1, AK026746.1, BC000090.1, AB047801.1, AK025431.1, AL133557.1, AL117649.1.
HOGAW62	434	579891	1 - 557	15 - 571	BF673679, BF340318, BF681126, AW630816, AW630056, BF684524, AI471808, D31084, BE932204, BE778532, AI365605.
HOGCK20	435	745445	1 - 2073	15 - 2087	AL517828, AL519145, AL531212, BE314599, AL527137, AL516077, AL521270, AL528374, AL517829, AL527760, BE410195, BF207279, BE894391, BE275383, BF344492, BE545217, BG116866, BE869193, BE910148, AL527158, BE905116, BE906070, BE539313, AL521271, BE544985, AW370647, AI080486, BE272322, AW129545, AW370565, AW370566, AW370569, AW370587, AW370585, AW370632, BF036759, BF11664, AW370635, BF036029, AV751399, AW370628, BF793770, BE161918, BE644987, BE513159, AL516078, AW952389, AA573800, AW361708, AW370597, BF793672, AW361545, AW370593, AI884757, BE905445, BE644790, AW370591, BG032275, BE545897, BF795549, BE781323, AW370583, AI751504, BE390637, AW370629, AW370626, BF307320, BF312112, BE616107, AW874541, AA599271, AA305125, BF305377, BF305746, BE304395, AI670082, BE548571, AI201054, AA044111, BF345456, AW387317, BF027143, AA410751, AW370645, AI979204, BE259925, AI687237, AW167891, BE385822, BE312740, AI828402, AI907591, AI819020, AW631188, BE298820, AA044057, AW103037, AA523198, BE298172, AA878137, AI754894, AI016005, AW662228, AI375007, AW130175, BF346901, BE388396, BF345509, AI690636, BE869078, AW440908, AW370586, AI907608, BF035998, BE293025, AI285110, BE139500, AI342760, AI862740, BE260090, BF761781, BF888238, AI028777, BF882332, BE877444, AA947042, AA032233, AW170149, BE893722, AW370624, AW273212, AI907602, BF310543, AA878164, BF763648, AI907600, AA618599, AA935855, AI074254, T69117, AI432547, AW370603, AI350390, AW510421, AA045976, BE737019, Z44367, AI613194, AA309604, AA846754, AW512536, T31182, BE615661, BE296557, AW370571, AI803040, C01877, AW516417, BE294829, AI241142, AA551200, AA506057, BF941946, AI805655, BF761823, BF083958, AI355466, AI751505, AA781304, BF875067, AA912801, AA620419, AA305077, Z40301, AW129402, AA806679, H83225, BE082695, BE263189, AI948632, BE938441, AW405902, AW370600, AL449482, AV693457, BG151231, BF879463, H25231, AI597749, BE244231, BF761766, AV688978, AA329345, T30732, AI420548, AA496987, AA852486, BE019097,

					BF881592, AI968145, AW197407, AW374690, RI8126, AA336532, AW952473, BF304701, AA852434, AI906426, AW023694, H82992, BF836259, BF836240, BF807559, AA852485, AA852433, AA336533, AI368088, BF337774, AW881423, AA306344, BE773038, AI739470, AI274423, H46420, AI268055, AW512535, AI364223, AI969087, AW881344, AI673433, AI933569, BE076501, AI590377, AA580549, AI371192, T31989, BE218679, BE764975, BF950840, D59206, AA862206, BE074269, BF110288, AW028921, BF821577, AW793552, F23516, AA323541, AI691101, BF359554, AF132940.1, AL121742.1, AB057724.1, AF314058.1, AL021578.4, AF058295.1, W32805.
HOGCK63	436	895880	1 - 1395	15 - 1409	AL515915, AL519637, AL516502, AL530378, AL534541, AL527244, BF206279, BE563468, BE894600, BF528095, BE734337, BE261458, BE547607, BF207129, BE018805, BE258538, AA314355, BF966160, BE259017, AI878986, BF527510, AW961100, BF218016, BF805533, BE935456, BE273252, BE935565, BE379416, BF689497, BE615561, BF805135, BG250649, BF805538, BG111006, W00898, BE394407, BF805707, BE543852, BE935562, BE538668, BG012784, BE797749, BE870449, AA340663, AA337437, BF093795, BE617246, BE168598, BF827571, BF827568, H74337, H26577, RI3677, BF827533, BE935468, BF920853, BF183200, BE617395, BG025917, BF769129, W52074, W00927, BE887136, N75733, BG253784, AA033549, BE938018, BF378489, BF531045, BE935512, AW389834, AW579752, BF984332, BE408926, N91321, T97551, AL530377, BF965806, BG112290, AL515914, BG104543, AW840975, AW840976, BG120271, BF808337, BE617147, BE174138, BF803235, N39949, BF852997, BF852999, AA037261, AA827575, T83003, N77103, BG178316, BF802890, BF980427, AW581002, BE311929, BE887785, BE892497, BE935460, BE935465, BF207193, AK027879.1, BC008732.1, BC001230.1, AF151835. 1.
HOGCS52	437	919898	1 - 2557	15 - 2571	AL530487, BE745421, BF330206, BE744240, BE732555, BE560832, BE728102, BE734494, BF340173, BE900928, BE899085, BG171027, BE407847, BF339012, BE391461, BE005931, BE387398, BE392364, AW962475, BF345275, BE269190, BE280532, BE870859, AI569503, BE392132, AL530895, BE908923, AA521235, BE295971, AW262804, AI264216, BE018918, BE890434, BE005979, BF961405, BF343159, BE715414, BE542338, BF792605, BE514659, AI636351, AI859499, AI744758, AA758222, BE675736, BF124910, AI126826, AW024550, BF530317, AA594600, AI567104, AI935268, BG149675, AW510761, AI280100, BG231713, AI363344, BE782378, BE245842, BF896674, N72581, AW082737, BF348228, AI291530, AI633705, AA483476, AI376854, AA862073, AI439117, AW360876, AA774640, BG006132, AI459751, BE504207, AW300087, AI673280, AI885032, AA405342, BE218474, BF896671, AI022088, AA788862, AW341140, AI168484, AA703032, AA631579, BF376297, AW026262, AA733166, AA878000, AA456364, AI693928, BE208332, AI377769, BE295604, T47288, AA393265, BF995787, H80493, AW261896, AA682322, AI189548, AW574867, AA224519, BE828754, BE828767, BG149772, AA523423, AA398668, AW264368, AW276800, AJ239429, C01609, N76973, BE294075, BF338783, BG261025, H81411, AA813297, AW263725, BF594376, BF088543, AW392277, AI362740, BE770083, BE828760, AW403980, BF309314, R71977, AA574078, AI949151, AI762166, H00206, AI360375, BE828785, BE089517, BF753501, W46600, N55486, BE828765, BE828818, BG011135, BE828755,

					BG013533, BE828764, AI991548, BE828773, BE828784, AW408627, AA988364, AI476154, BE828772, BE828763, BE828777, BE828813, BE828802, BE828774, BE828753, AW592301, BE828608, BF372548, BE828807, BE828817, BF359084, AW374260, R73494, AI796868, T58646, AW316844, BE828775, BE770090, BF359052, BE156325, R73493, BE828812, BE395483, BE828766, AI284200, AI948980, BF510303, AV682937, BE828741, AW302496, BE770069, AA580230, BE828804, BE828732, D78676, W46599, AW613792, BE770079, AI420509, BF336410, BE001474, W02183, BE828816, BF49624, BE828821, BE828811, BE828757, AW469085, AI262650, R38776, AI857255, BE243177, BE828778, AA962198, BE828801, BE828835, BE828815, BE828803, BF359073, BE770068, BF376437, AI784360, AW167008, BE770087, BF359066, BE828786, R79914, R40070, W28668, BE828806, AW105212, BE828745, BF376305, BE828783, T31551, BE828828, BE828833, BE828733, BE828822, BF372547, BE770076, BE770064, BE828750, BE770091, BE001475, AI290085, R62897, AI700843, BE828752, AI198489, AA095791, R36923, BF372554, R20930, BE706927, T58696, BE828809, AK027519.1, AI245621.1, AC011475.6, AF070636. I.
HOHBB49	438	833080	1 - 3066	15 - 3080	AW176451, AV763354, AV764307, AI284640, AV760937, AW193265, AV762111, AV764241, AL046409, AI963720, AI270117, AV710066, BF668217, AV759274, AV763255, AV761786, AV762139, AI281881, AV760571, AA577906, AL038705, AV740801, AW406447, AV761745, AI345634, AW270382, BE253048, AA483223, AA491814, AI431303, AA526787, AV762050, AV763971, AI334443, BF677892, AI801482, AF330238, AW419262, AA491284, AA468022, AW500125, AV762098, AV759382, AW274346, AI350211, BF347791, BF347740, AA610491, AV762395, AI613280, AW517377, AV761925, AW502975, BE394054, AA490183, AV763122, AW662543, AV733370, AI619997, BE150580, BE047069, AV761294, BE139146, AV759362, AL041690, BF475381, BE160727, AA523837, BF854876, AV759204, BF337291, BF915247, AI654525, AA581903, BE350772, W79504, AA623002, AW963497, AA610493, BF915628, AW503666, AW960468, AA584167, AI799642, AV762009, F36273, AI732865, AI355206, BF915722, AL121235, AV762826, AA533725, AL048925, AV760777, AW276827, AW438643, AW238278, BG249643, BF793766, AV763847, BF915839, AI061334, AW504669, AI821271, AV764578, AA503015, AA613203, AI499938, AI754658, AI561060, AW410400, AA469451, AV761362, AW273218, AA806796, BE672637, AW265393, AA101689, AV761106, AI754336, W47183, BG104686, AA780515, AV728632, BE350475, AI375710, AA493471, AA507824, AI811687, AV728928, AW473163, AV728425, AA613232, AA587604, AA653618, AW070892, AL044940, AW167372, BG059450, AI860013, AI149478, AL042420, AA446657, BF991286, AW072923, BF940837, AW956640, BF883982, AV759239, AW769399, AA630925, AV760704, AA525824, BF697673, AV725423, AI744995, AI085719, AA665021, AV761489, AV762154, AA578997, AI688846, AV762505, BF970654, AV760624, AA682912, AW962175, BE072475, AV710774, AW500353, AW979060, BF592311, AI732120, AW731867, AV658631, AI860020, AW088202, AA599920, AW193432, AI133164, AI246119, AI471481, AI368745, H72402, AV760042, AI610159, AW513362, AI345681, AI345675, BF592200, BE042649, AA834792, AW956641, AA984708,

AA580808, AV733830, AW073470, BF805504, AV762397, AW576503, AL048626, AI499503, BG222267, AW072587, BF919090, AI801600, BF918590, AI890348, AV762064, AV760057, AW833862, AI610920, AV763670, BF056371, AV761843, AA837677, BF679809, AI954260, BF790509, AI251436, AI053672, AV703682, AV733400, AA610783, AV759172, AW261871, AW021583, AI298710, BF812839, AL042753, AV710770, AV763183, AV763195, AA703891, AF015153.1, D83989.1, U57005.1, X55932.1, U57009.1, X54178.1, X54181.1, U57007.1, X55931.1, X54175.1, U18391.1, U18398.1, U18394.1, AF077058.1, X55925.1, AP001716.1, U18392.1, M37551.1, X55926.1, X55927.1, U18395.1, U18393.1, X54176.1, U67801.1, X54179.1, AF015157.1, X75335.1, U18400.1, U57006.1, AP001331.1, X54180.1, X53550.1, X55924.1, AP000112.1, U57008.1, U67832.1, AP000044.1, X53549.1, U04355.1, AF015156.1, U67831.1, L47228.1, U18387.1, X55923.1, M77848.1, AF015148.1, U18399.1, Z84814.1, U18390.1, X55929.1, U67827.1, AC073258.9, AF015147.1, U67825.1, AL132985.4, AF015151.1, AP003479.1, X76070.1, AF232289.1, AP000297.2, X55922.1, AC007043.3, AL050335.32, X55933.1, AC073138.3, AC023058.17, AL353748.13, AF015149.1, U67826.1, AF302689.1, U57004.1, AF015167.1, X55930.1, AC007919.18, U18388.1, AC023114.5, AP001172.1, BC001368.1, AF015158.1, AP001605.1, AC005790.1, AC022425.6, AL023755.5, AL034548.25, AC006271.1, AL355534.13, AC000025.2, AL135858.3, AC083868.2, AL390056.7, Z82976.1, U67829.1, AC007193.1, AC018506.4, AC016026.13, AL158815.14, AP000567.2, AC078882.8, AL022163.1, AL353715.21, AC012476.8, AL121751.12, AC008115.3, AC073910.20, AC006195.1, AP001708.1, AL159191.4, AC008482.5, AC009996.7, AC007005.3, AC026172.3, AP001709.1, AC006130.1, AC007677.3, AC003684.1, AP001698.1, AL022302.10, AL355112.3, AC003954.1, AL137059.20, AC011477.5, AL161897.6, AP001699.1, AL157903.15, AC007446.8, AL023879.1, AL023876.2, AL022238.1, AL133238.3, AC005032.2, AC053523.5, AL118501.22, AP000244.1, AC012170.6, AC080011.21, Z69666.1, U18389.1, U95742.1, AC079906.15, AC009161.12, AL353807.18, AL023284.1, AC013434.8, AL136969.7, AC024163.2, AL160191.2, AC004848.1, AL160273.9, AC011310.3, X74558.1, AL117382.28, AL450339.5, AK025812.1, AC019205.4, AC007462.2, AC027319.5, AC002565.1, AL445928.8, AL136139.6, AL121899.37, AL445189.7, U67221.1, AC005701.1, AC011485.6, AC006337.4, AL031774.1, AL021918.1, AL133289.9, AC007620.30, AL035417.15, AJ246003.1, AC010328.4, AL109807.16, AC008155.9, AC068713.8, Z93016.2, AP002456.3, AC074031.16, AC004815.2, AC004746.1, AP001929.4, AL049576.19, AF053356.1, AC023908.6, AC006483.3, Z93020.1, AC005520.2, AC022211.5, AF015155.1, AC006349.3, Z98744.1, AC005193.2, AL359091.10, AC004957.1, AL109984.14, AL136094.13, AC005840.2, AC004019.20, AL008630.1, AC007216.2, AC016948.4, AL137060.13, U67231.1, AC007386.3, AL096814.26, AP001603.1, AC020659.5, AL360169.17, AC011286.7, AC079347.6, AJ277662.1, AL139809.16, AP000855.3, AL163973.1, AC078843.2, AC017082.4, AL049776.3, AK022177.1, AL354932.26, AC004638.1, AL359831.9, AC006312.8, AC011475.6, AC020931.5, AL121655.1, AC004650.1, Z46936.1, Z82244.1, AC005251.1, AF015166.1, AL021977.10, AL133387.8, AJ010598.1, AC024561.4, AL109623.9, AL355481.12, AC002430.1,					
--	--	--	--	--	--

						AC011471.6, AF135028.1, AC006057.5, AL135940.11, AL031391.1, AL023575.1, AC004534.1, AC003080.1, AC009179.17, AC007240.2, AL022328.21, AL445209.4, AC007191. 1.
HOHBC68	439	603968	1 - 1823	15 - 1837		AW889450, BF799811, AW961831, AA309158, AA309202, BG005728, BF998803, AW888368, AI904188, AK000465.1, AB033025.1, AL109667. 1.
HOHBY12	440	625973	1 - 1174	15 - 1188		AI566933, BF916217, BF991303, AB051431.1, AL022339.1, AL021937. 1.
HOHBY44	441	873264	1 - 3355	15 - 3369		AW604409, AI037867, AW604404, AW368603, AW151676, AW383192, BE696058, BE927254, BF431876, AI753734, AI754387, BE696055, AW044602, AW383224, AI041650, AW383194, AI750595, AW383164, AI884505, W52686, AW069006, BG256681, AW842507, AW956164, AI750594, AA600082, AW078795, AI753050, AI802788, AW190902, AI750578, AW957491, BF055368, AI041803, AI621183, AW631119, AI750577, AW383125, BF215485, AA599801, AW087935, N31127, BE696060, W51909, AI087351, W47324, AA071381, W48619, AA670070, W48852, N35377, AI752124, AI090390, W42791, W47325, N28395, N28453, BE693590, BE693587, AI085102, AI678451, AA545734, W42884, AA373348, AI302125, AI910477, H80042, AA071138, AA669811, AW361415, AW069430, AA788723, AW069485, AW853798, AI940729, AI754608, AW580737, AA376403, BF508389, AA373673, H99469, AA373544, AW473621, BF881941, AI888605, AA373014, AI940705, AA373975, N27040, C01826, AA373298, AA112124, AA084001, BE140157, AI940795, AA372833, BE140143, BE140150, AW005943, BE140098, BE140177, BE140175, BE140179, BE140161, BE140145, BE140148, BE140155, BE140167, BE140163, BE140147, BE140158, BE140149, BE140176, BE140107, BE140146, BE140152, BE140144, BE140099, BE140102, BE140166, BE140116, BE140156, BE140173, BE933516, BE140174, BE140104, AW239511, BG108248, BE140160, BE140171, BE140105, AI521673, BE140109, BE140164, BE140172, AW806615, BF109257, AW138508, BF217716, BE140108, AI932934, BE140103, AA373557, BE140153, BE140117, AA344024, W25447, AW806557, AI537571, BE140162, C01953, AI476777, AW583945, AF110137.2, AL359060.1, AL359059.1, AF154054.1, AB032372.1, AF045800. 1.
HOHCC74	442	547977	1 - 544	15 - 558		BF217791, AV747014, T66046, AA676735, F12094, AL043886, T65277, AC018755.3, D50419. 1.
HOHCH55	443	827481	1 - 2485	15 - 2499		AW967050, BF793252, AA150407, AI889756, AW068908, AI539422, AI189000, AA149419, AA047109, AW304902, AI750990, AI123024, AA317245, AI752854, AI095919, AI984090, AI679980, AI954496, AA047265, BF749346, AW068311, AA136657, AA417383, AA446268, BE763257, AA136596, AA852682, BG222753, AA150286, AA417352, N52533, N52541, AA149305, AI129506, AA723730, BF987955, C01867, AA45992, BF928215, AF072752.1, AB008375.1, AL160153.11, AL355807.11, AL139800.10, AL359052. 1.
HONAH29	444	129992 8	1 - 1609	15 - 1623		BE877138, BE541324, AW961713, BF130173, AA446931, BF982552, AI750643, AW298762, BF678790, W44974, AI752977, H70832, BE865917, AA279599, AA661554, AA362887, AA347452, AW955588, T55597, AA443355, W42674, AA452666, BG168559, AA774309, AA828840, AW021674, AI124558, AW304932, AV763460, BF915849, AW576388, AV759517, AW023975, AW403177, BF817511, AA702637, AW237905, AW839858, AW409626, AA557945, AA661583, BF815277,

				AL039436, AI640905, AA584360, AA282951, AF147776, AI444575, AA557911, AL042667, AL042670, AI251024, AI702049, AA468458, AA604149, AW069273, AI254267, R83585, AV758849, F25759, AI439525, F35374, AA604601, AI753969, AU146789, BG059139, AW265468, AW615441, W04133, AI167656, BE886321, AW514844, AI798521, AW516058, AV720223, BG180320, AU158382, AI921350, AL121039, AI912867, AA312920, AW975239, AI523356, AA828613, AI358505, AW409621, AI282479, AW270385, AV728973, BE062545, AU152824, AI308529, BF739035, AW029626, AW327673, AA218874, AA218757, AW410844, AI744963, AA847341, BF901147, AU151031, H84028, BE045167, AV719881, AV755245, AV729090, AW968188, AU150590, AU154339, AI888050, AI554399, AA228268, BE139139, AV718593, T03576, AI250552, AI251034, AI254770, AI284543, BF882222, AI581119, AU147301, AA169245, AU152669, BE260841, AI064968, AI860648, AW861117, AA835702, AA663579, AU149150, AI281622, AK000738.1, BC005206.1, AC007285.3, AC006435.7, AC002070.1, AL356575.8, AC010150.3, AL157829.24, AC007011.1, AL137792.11, AL139316.5, AC067722.21, AP000689.1, DI4872.1, AF243527.1, AL034420.16, AC087879.8, AC018828.3, AL138724.12, AC022383.3, AB003151.1, AC004067.1, AC020916.7, AC026464.6, AL133174.15, AL450226.1, AL139195.4, AC007226.3, AL121890.34, AC009948.3, AC083863.2, AC022384.4, AP001725.1, AL121594.6, AL121893.21, AC073657.5, AC005245.1, AL096819.17, AC091394.2, AL135858.3, AC008745.6, AC010654.8, AL035684.25, AL109743.4, AC010742.4, AF084941.1, AL138756.23, AL121886.22, L78833.1, AC011464.5, AL136137.15, AC005785.1, AC007240.2, AL133453.3, AC007688.15, AC020552.4, AL031433.4, AC005399.19, AL355543.13, AC002350.1, AC002465.1, AJ003147.1, AC002558.1, AL353804.22, AF207550.1, AC004814.2, AC007151.2, AL136418.4, AL139054.1, AL160471.5, AL035420.15, AC010271.6, AC006468.9, AE006463.1, AL353748.13, AL161871.6, AC007375.6, AB023048.1, AC005666.1, AC004659.1, AC005412.6, AC008739.5, AL022320.23, AC084864.2, AL163612.5, AC005899.1, AC010139.4, AC008764.7, AC006486.1, AC011480.3, AC005306.2, AL391647.16, AC034193.4, AL133246.2, AL008734.10, AL135839.15, AC010282.5, AL121712.27, AC010205.5, AJ011930.1, AC009131.6, AL117336.22, AC009506.5, AL138759.20, AC015937.7, AL445489.10, AL008731.1, AC008784.6, AC004223.1, AC015801.25, AL133371.3, AC034235.4, AC010422.7, AL022727.1, AL352978.6, AC010789.9, AC011816.17, AC007956.5, AC004089.25, AC003041.1, AC090937.1, AC018808.4, AC006057.5, AL358174.12, AL121933.15, AC010316.6, AC005837.1, AL445263.6, AL050341.18, AP000107.1, AC011811.42, AL031311.1, AC004765.2, AL096701.14, AL133477.16, AL109952.15, AL160037.17, AL135838.5, L44140.1, AC008672.5, AC002425.1, AC011465.4, AL122004.17, AC004824.3, AL136305.14, AL133241.3, AC079907.25, AC019205.4, AC005516.1, AC004812.1, AC005911.6, Z98884.11, AC008626.5, AC009314.4, AL117329.8, AC005747.1, AC006385.3, AC005907.1, AL354864.16, AC005102.1, AC011495.6, AC010326.6, AC006463.3, AL121928.13, AL450339.5, AL021707.2, AC010530.7, AL136228.8, AC024561.4, AC009060.7, AC011450.4, AL096712.20, AC005330.2, AC002477.1, AC006344.2, AL109825.23, AL353682.11, AC007900.5, AL109923.29, AC005365.1, AP000502.1, AL035588.21, AK000832.1,
--	--	--	--	--

					AL035079.14, AC009399.5, AC005755.1, AL021453.1, AF148460.1, AC013467.8, AL354808.24, AC009476.3, AL162724.16, AL356805.5, AP001670.1, AL031284.9, AC009362.8, AL162231.20, AC004685.1, AL139415.10, AC004383.1, AC009756.9, AC007546.5, AC007318.4, AC025166.7, AC004491.1, AL353579.17, AC005207.1, Z69650.1, AL161670.4, AC005280.3, U96629.1, AC002369.1, AC040160.4, AP000350.1, AC068323.8, AC005694.3, AC002306.1, AL136526.27, AL355480.22, AF111168.2, AC025097.41, AK022821.1, AC053513.4, AC007637.9, AL359644.10, AL139383.14, AC009137.6, Z73495.1, AC007383.4, AL132712.4, AL355343.18, AL109984.14, AL354928.9, AL138720.19, AC006039.2, AC008649.6, AL445198.13, AL080317.11, AC008403.6, AL121655.1, AC091810.1, AL161799.19, AL049780.4, AC016772.8, AC003684.1, AP000349.1, AL137791.19, AC005244. 1.
HOSDI25	445	854234	1 - 2200	15 - 2214	AL521533, BF966564, BG109192, BE621548, BG259805, BF666690, BF667661, BF185318, BF666019, BE621125, AI433432, AW963800, BE883279, BF028488, BF667980, BF196902, BF111775, BF667265, BF664922, BF966437, BF667218, AI277896, BF028500, AI401346, BF696865, BF698781, BG169528, BF696312, AW338135, AI280253, AA873621, AI435513, BE552077, BF699387, BF055949, BF697521, BE542555, AI277959, AA121788, AI961880, AW969937, BF478121, AW338124, AA528626, AW367010, R76478, AA101422, T62844, AI918990, BE167397, W72961, AA876737, R28131, BE176581, AA375127, BF332407, AI365181, W73131, T62693, W21429, N92911, BF570557, AI077290, AA127501, R66340, AI926197, C00153, AA813575, R28517, AI580500, AI222072, AI033269, AA758476, W86851, AV661704, AV725920, AV728997, AV704234, AV726624, AV655280, AV729378, AV708992, AV727787, AV709407, AV654908, AV660608, AV652001, AV656903, AV707541, AV706854, AV702117, AV726738, AV728733, AV708834, AV687035, AV697196, AV708704, AV659322, AV656478, AV698545, AV709314, AV708381, AV660728, AV691080, AV651955, AV703169, AV728518, AW952409, AV709660, AV729220, AV696866, AV726816, AV695545, AV656283, AV708025, AV707933, AV684604, AV708980, AV692691, AV701914, AV705159, AV702516, AV693523, AV726103, AV727029, AV725826, AV725134, AV705280, AV702994, AV683272, AV697288, AV652156, AV728670, AV708723, AV729263, AV707510, AV699089, AV658863, AV701560, AV727776, AV698609, AV696106, AV706744, AV708438, AW951263, AV689111, AV728157, AV708109, AV692345, AV704553, AV683443, AV708893, AV659536, AV706219, AV658275, AV705693, AW960720, AV686064, AV705632, AV706721, AV701067, AV709604, AV704955, AV701707, AV707753, AV706089, AV704269, AV703495, AV702021, AV706677, AW960326, AV709869, AV656256, AV687909, AW954031, AV702832, AV708622, AV729259, AV726784, AV702833, AV707296, AV707767, AW958647, AV654896, AV645906, AV728806, AV652617, AV703599, AV727990, AV701580, AV708004, AV727003, AV703970, AV727526, AV727799, AV728471, AV703472, AV702147, AV686060, AV726156, AV649758, AV706342, AV702266, AV729189, AW953965, AV696931, AV698429, AV692972, AV685688, AV689800, AV693005, AV709390, AW953787, AW952414, AV722222, AV645936, AW955653, AV706185, AV684075, AW951618, AV658332, AV703168,

					AV648263, AV705384, AV707024, AV727807, AV952410, AV707792, AV726259, AW955723, AV706279, AW954439, AV647659, AV725617, AV698583, BC005700.1, AL137163.1, Z83826.12, AF086333.1, AF217994.1, Y08991. 1.
HOSEG51	446	545809	1 - 576	15 - 590	AA181348, AW968493, AI651957, BF593221, AU157244, AA459376, AI078788, AU144318, AI270699, AW605061, AI082584, AI522177, BE645867, AU149785, AA909435, AV716472, AW139763, N52810, AA610587, BE937915, AA765149, AW385335, BE709275, AA774278, AL538336, AK002014.1, AK021520.1, AK001369. 1.
HOSFD58	447	614040	1 - 2513	15 - 2527	AL517202, AL517203, AW957146, BG116418, BF038478, AI563954, AU132232, AA932901, AI755091, AI831671, BE889854, AU127679, BE891799, AI582904, AI038368, BE246025, BG177748, BE906332, BE277910, BF982210, BE276343, AI633334, BE891988, AI954440, AI687563, BF984413, AW956931, AI565064, AI879207, AW778725, AI472032, AI924693, BF972236, BE889752, AV753606, BE536916, BE269039, BF196580, AA165526, AI248179, BF060729, BF308455, BE539211, AV734590, AA165570, AI219806, AI803270, BF027703, AI433120, AA780394, AW593783, AA305509, BE887807, BF032636, AA314159, AA745078, BE677439, AU150180, AI525645, AL046195, AW388378, AA740296, BE858748, AA745958, AV753692, BE934649, AI879591, BE671082, AW390682, AI091788, AW118905, AW407201, AI521298, BE327080, AA993868, BE550016, N39180, AI249054, BE301992, AI147071, AA137129, AA939319, AA593391, AI751805, N62852, AW473172, AA513491, AA630359, T09181, AA824241, H40891, AI570848, N77759, AA169832, BF948867, H18116, AW875628, N48472, AI168762, AI984827, AA312180, T15583, AW263215, H07053, AA644510, BE018377, H12907, N39112, AI751806, AI538630, AI478724, AI364661, R54299, AA137058, AW571962, AW137978, AA236150, BF512413, T31959, T09180, AA165129, AW965437, N49188, AI393653, T31501, AI889542, AA507842, R51911, AW273523, AI807100, AV695683, AW085260, T36296, AA236118, AI091951, H50337, AA493467, AW664638, AA304893, AW150373, AW519322, BF901925, AW079446, AA029150, N73896, BF744173, AA878611, H07054, AA676446, H05492, AA332663, AI167495, AA361172, AI240673, AA337044, T05940, T34466, AW474105, AW388354, N45253, AI460248, BF750384, AI954456, T16557, T31824, BE763619, AI499330, AA385497, N84723, BE842309, AW387927, AW388264, H28059, N50243, AW387979, D56528, AA169652, AL036975, AL043667, BF375439, AI908550, AA029027, AW387992, W03958, BE778418, AA484014, BF992834, AA019284, AF105227.1, Y10387.1, AF033026.1, AF016496.1, U53447.1, AC004045.1, AF097721.1, AF097719.1, AF097712.1, AF097720.1, AF097717.1, AF097713.1, AF097718.1, AF097714.1, AF097711.1, AF097715.1, AF097716.1, AF097710. 1.
HOUQC17	448	429229	1 - 4698	15 - 4712	AI810627, BF344199, BG056542, BG118486, AI126019, BE784908, AW954313, W07142, AA133346, BE047207, AV700629, AW163200, AI692832, BF589805, AW195344, AI755040, AW964293, AI890478, BE856510, BF370410, AW168050, AI985641, AI926525, AI369060, AI654583, AI571069, AU158513, AW167394, AI129429, BF244275, AW474740, AI887177, BF083290, AA993528, N91530, AI148739, BE925407, AW001362, AA022464, BF203604, AW194129, BF590332, AI144408,

					AI335849, AI342643, CI18560, AI089584, BE934752, AI128171, BF476695, AI889755, AA677116, AW613713, AW163724, AA011376, AI684137, AI953558, AI097021, AA029247, BF589929, W47316, AA129732, AI168616, N59612, H98678, AV725614, AI280406, AI160430, AW080654, AU156318, AA834490, AI368138, AW207161, AI690716, AA677837, AA031474, AW104712, AW474712, AI559164, AA662930, W92688, W35345, AA057170, BF759760, AI340202, AI569560, AI185000, AI199506, AA757215, N40523, AA151507, BF221465, R19976, W47201, AI769318, T86778, N95765, AA595069, AI128696, W92831, N29991, T95293, AA028027, AA903074, AA703651, W24878, AA918632, Z43925, AI027793, AA328867, AA634915, AW967361, AA846139, AW204001, AI537176, N27243, AI859558, BF437005, AI921704, AI040586, R13547, AI719476, H28325, AW630984, AI765271, AA987460, R76276, W23529, N36334, AI270245, H28326, AI160028, H27128, AA345812, AA368429, AA373718, AA011364, AI370696, AI537518, AA296523, H89564, R20636, T40492, AI827556, BF197787, AA807465, AI047040, T95373, AI686088, H89565, R20667, R76553, N88341, AI689182, AW150550, T36271, AI932695, N46572, BF993688, T39243, AA781059, BE933134, AW050514, C03600, Z41664, AA088617, AA904875, AA897320, BG055227, AW050517, T86685, AI648649, AA040690, BE767617, BF370964, AA031616, AA029035, AI369552, AU140483, T10738, R45078, AW150472, AI933450, T41144, AA028018, AW630434, T40309, BE936581, BF370970, AA022997, BF370966, AW470024, AA706779, AV721513, AW804344, AA776485, AI191274, AW844411, T41173, BF307057, AI224577, BE838061, AW858526, AW604723, AW392670, AW858525, U46347, AL043003, AW363220, AW384394, AW861889, AW858455, AW804686, AL119457, AW604726, AL119399, AL119484, BE695785, AW861944, AL119396, AL119439, U46351, AL119324, AL119319, BE705903, Z99396, BE705906, AW577135, AL119522, U46350, AW372827, U46349, AL119483, AW877209, AL119391, BF868684, AL119497, AF170084.1, AB037767.1, AF207664.1, AF060152.1, AL162080.1, AP001697.1, AP001598.1, AP001599.1, AK023795.1, AL355724.1, AL355723.1, AB026436. 1.
HOUDK26	449	565393	1 - 1037	15 - 1051	H20994, H45211, H45368, H40040, H45293, AU156903, H45192, AA205743, T24020, AW468607, T90417, AK001944.1, AF075043.1, AC025593.5, AC009299.5, AC005519.3, AC007954.7, AC004755.2, AL138837.12, AC005516.1, AJ251863.1, AC010899.8, AC009410.3, AL049836.3, H30375.
HOVCA92	450	527644	1 - 693	15 - 707	AW938534, BF963516, BF958753, BF956694, BF957465, BF362599, D38712, AC000385.1, AF061779.1, U73627. 1.
HPASA81	451	135238 2	1 - 1931	15 - 1945	AI417638, BG142227, BE047043, AI378918, AW968451, AA459131, W60474, D82310, W45474, AA367179, AF305835. 1.
HPBCU51	452	411080	1 - 585	15 - 599	AA364901, AL526211, AV723053, AV722100, AL538154, BE255102, BE251465, BE257971, AU142823, AL535042, BE252516, AI589512, BE256907, AI142896, BC008763.1, BC000189.1, D82343. 1.
HPDDC77	453	130689 9	1 - 964	15 - 978	BF337609, AV745285, W56118, AA411082, BF031537, AA250775, BE813320, AA862532, AA862534, BF669016, AA505270, BF130828, T32131, AA372427, BF696363, BF028658, AW518578,

					BF030194, BF131517, BE179443, BF030661, AW630420, AW900594, A1267426, BF381745, A236139, AA318983, AA164404, AL534009, AL047026, BF095360, T07060, AW891586, BF541413, BG168343, BF928857, R79561, BE380028, R33720, C01622, Z24914, AV746413, AV752615, BE708396, BF910231, BE925952, BF540973, R36171, D54233, AW818345, AB037797.1, AK025028.1, AK026917.1, AF250324.1, AC079801. 2.
HPDWP28	454	109460 9	1 - 514	15 - 528	AI394037, AW303979, AW293101, AI827868, AA010190, BF001923, AW006972, AI809548, AW138946, BF476527, BF084139, AK025743.1, AP000067. 1.
HPEAD48	455	520367	1 - 611	15 - 625	AW964468, D80045, AW966389, AW949645, AW966330, AW949642, AW964532, AW965158, AW949643, AV738340, AV744012, AW975618, AV744690, AW366296, AV702035, AV723097, C14389, AV724520, AV742048, AW962395, D51799, AW964488, AV719468, D59502, AW375405, D80195, AV720791, AA305578, AW966050, AW965185, AW965197, AW959597, AV742732, AV718800, D80164, AV742050, AW966053, AW966013, AW949658, AW975621, AW966054, AV719783, AW966534, AV720464, AI905856, AW960465, AW949654, AV705134, AW966022, AW966075, AW966041, C15076, AW966065, AW973541, D80038, AW978648, AW959062, AV719324, AV718440, AV720028, AW975613, D59467, AW965196, AW965184, AW965175, D59275, AV718770, AW966030, AV719188, D80227, AW964477, AW966062, AW949641, AW949646, AW959570, AW966029, AV718707, AV705869, AV699927, AW973334, AW966531, AW978634, AW956434, D58283, D80022, AW965163, D80166, AW959799, AW966059, D80193, AW960473, D59859, D59619, D80210, D80391, AV704180, AW960553, D80240, C14331, AW973474, AV719822, AV718692, D59787, D51423, AW973488, AW978661, AV720211, AV718844, D81030, D80253, AV718489, AV720203, AW964756, AW973307, D80043, AV723927, AW177440, AV718938, AW949656, AV718633, AW959628, AW965177, AW975605, AW973485, AV718931, AV720878, AV719557, AV720731, AW973482, AV699447, AW958992, AW958993, AV722801, AW959136, AV699550, AW962082, D80269, AW959202, AV720812, D80212, D80196, AW949657, D80188, D80024, D50979, D80219, AV706147, AW753067, D80268, AW966043, AW949655, AW959582, D59927, D59610, AV720533, D57483, AA305409, AV719628, D80378, D80366, AV741220, D51022, AV706229, AW973330, AW962245, AV721386, AW973447, D59889, D50995, AA514188, D81026, AV727978, AW960454, AW949653, AW949631, AW949618, AW959469, AW964737, AW966032, AV720150, AW960532, AW956397, AW949629, D51060, AW949633, AW949632, AV700889, AV699866, AV701123, C14429, AW973490, AW752082, AV726812, AW753053, AW965176, AW966023, D80241, AW177501, AW960564, AW177511, AA514186, AW178893, AW949630, AW960504, AV699746, AW375406, AV700229, AV699682, AW973465, AW960474, D80248, AV718530, AV703542, AV701004, D80522, AW975623, T03269, AV720654, AV699669, AW960570, AW360811, AW179328, AW964541, AW973473, AW973445, AV720220, C75259, AV720616, AW966332, D80251, AV719000, C14014, AW352117, D80133, AW960514, AW966399, AW966333, AW966331, AW753041, AV718908, D58253, AV742001, AV742667, AV742022, AL136136.7, AF058696.1, AB028859.1, X67155.2, AF271371.1, D34614.1,

HPEBE79	456	519003	1 - 583	15 - 597	D88547.1, AB002449.1, D50010.1, AB038216.1, U79457. 1. AA578773, BF858286, BF373619, BF373581, BF858371, BF373406, AV727418, AW975618, AV720791, AW964468, AV724520, AW966389, AA809122, AI535686, AV702035, AW964541, AV718692, C14331, AW966330, AV718489, AW949645, C14344, AV705869, C14407, AW973541, AV699927, AW960473, AV704548, AW964477, AW960553, AW973445, AV720104, AW949500, AV718681, D80269, AW966534, AW978648, D50979, D80227, D81026, AW966343, AV726609, AW966062, AV719758, AW962395, D59467, AV719188, AI557751, AV719632, D80195, AV718487, AV706147, AW966380, AW959062, AW964532, AW966399, AW960520, AW975605, AW966053, AW949641, D80164, C06015, C15076, AV719913, AW960465, AV654329, D59551, N66429, AW949646, AW966022, D80258, D80038, AW952852, AV720203, AW966333, AW964756, AW966050, AW966013, AW965185, AW965197, AW966041, AW965175, AV718931, AV720731, AA305578, AW975621, AV700229, AW956434, AW949658, D59503, D59275, D80045, AV720533, AW966054, H67854, AV719783, D59502, AW959597, AW959570, AV719468, AV718800, AW966400, AV720464, AW966332, AV720150, AV655880, D80302, AW949634, AW949654, AW949586, C03092, AW960483, AV723097, AW966369, C14389, AV726330, D45273, D59610, AV699866, AW975613, AW973490, F13647, AA514188, D51799, AV719644, AW975623, AW960534, AW966029, AW966075, H67866, AW966065, AW966342, D80439, AW973334, AW966531, AW978634, D58246, D81030, AV722801, AW966385, D80251, D57483, T11417, D58283, D59317, AV726423, D80157, AV720088, AW959799, AW966059, AV718938, AV694084, AV689813, AW966043, AV718633, AW959628, D50995, D59859, AW966378, AW959469, AW973485, D80022, D80014, D80166, AW973474, D80378, D80212, D80268, AW973473, D80366, AW959582, AV727414, D59889, C14973, AW965176, D80196, D80188, D51423, D59619, D80133, D80247, C14227, AV702365, D51022, AW966388, AW978661, D80210, AW965163, D80391, AV720151, D80240, D80253, AV701839, AW966030, AV719822, D80219, AV719945, AV719391, AW973307, D80043, D59787, AW973447, AV719324, AV718440, AV720028, AW952839, D80064, AW965177, AA305409, AW950578, AW965196, AV718707, AW965184, AW973488, AW966386, AW960454, AV720211, AV720291, AV720878, AW966368, AV718844, AV719557, AV720616, AV718770, AV720729, AW966032, AW973330, AW966331, AW973482, AW966398, AV699447, AW966397, AV692290, AW960532, AV700357, AW950117, AW958992, AW960514, AW958993, AW949498, AV723927, AW965158, AW959136, AV699715, AF103907.1, AF103908.1, AL359314.14, AB002449.1, AB028859.1, AF058696. 1.
HPFCL43	457	535710	1 - 651	15 - 665	BF976224, AV729127, AA837404, AV729103, BG055177, AW169122, AI796276, AA603456, AV729600, BF447152, BF059491, AW196971, AI566470, AI636657, AA279066, AA845528, BE219765, AV725215, AV725488, AA046476, AI025283, BF663369, BE379318, AA936074, AA031332, BF003040, BE467269, BE270829, BG060181, AA568448, AV727986, BE271012, AI351514, AW470751, AA878870, AA026888, BE879122, AA015966, AA632383, AI090910, H20001, AA150301, AV725538, AW236006, AA625391, AV704013, BE737339, AI358381, AI476276,

						<p>AI718051, AV728067, BE561457, AL048514, BF105823, AV756946, AV758524, BF576620, AA455061, AW955472, AI337508, AA026657, AI468881, AI559878, AA090696, AA455761, BF132919, BF790637, AW062362, AW149768, AA743298, AA447922, AA031331, BE839021, BG104864, AA446847, AA148792, AV702908, AV712537, AI370062, BC007349.1, AF151895.1, AF110777.1, AC007241.3, AC007742. 4.</p>
HPFDG48	458	542227	1 - 709	15 - 723		<p>AI005650, AW193649, T86155, R91705, R94928, T86262, R92142, T78635, BG059124, BG059311, T79120, BG105372, BE903730, F32795, AI086235, AI304866, AI094698, AI268640, AA894578, AI081163, BE856894, AI380568, R12395, BG031198, AI708047, AI358636, AI142089, AI216820, AI684336, AA804193, AA552494, AA687862, AA507473, AA879115, AA279014, AA513429, AI571415, AA918417, AI971055, AI051704, AI937021, AA099438, AI494389, AI493513, AA948053, AA581118, AI184757, AA100071, BE731794, AI879919, AI085722, AI536966, AI591039, BF124917, AI830888, AI334931, AW008928, BE274775, BE902881, BF125296, AA595467, BE281210, R71239, BE392986, BE268783, R96465, F37009, BF818912, AA401736, AA857524, AA654076, AI620153, F21367, AA292902, AF004164, AA316678, BF845471, BE694933, BF433106, AW166722, AI866691, AI859464, BE047798, AI521799, AI589947, AA713511, AW082623, AA713851, BG110241, AI918554, AW151979, AW006947, AI889379, AI049669, AV750565, BF791871, AL042191, AI345415, AA580663, AI690813, AW194014, BG029058, BF814360, AI690948, AI554343, AI866465, AI623941, AI560227, AI801325, BE965064, AW083804, AI623648, AW263569, BE393551, AI499986, AW055252, AW263804, AI627714, AI688854, AA761557, BE883591, W48671, AI287476, AI886355, AI500523, AW088605, AI433611, AW025279, BF925370, AI241763, AI491710, AI468873, AI859644, AI658566, BE879772, AI860027, AI023513, AI865942, AI648699, AI285439, AI334893, AI699020, AV757875, AW163834, AA479803, BF339548, AA999906, AI919600, BF753037, AI471429, AI539545, BE536058, AI636507, AI582932, AI305157, AI632036, N99092, R20540, AI475270, AW151132, AW827211, BE964497, AA853033, AW169784, AI440422, AI680504, AI445505, AW021373, BE875959, AA514684, BG168185, AA693444, AI584118, AA776730, AI872472, AI872489, AI887381, AA827630, AV721917, AV732941, AA761608, AI784214, AI310332, AI313032, AI696714, AI818565, AL079447, AI949510, AI653402, BF812963, AI819016, BG001293, AW020381, BG257721, BE790023, AW084233, AI868931, AI871660, AI687689, AI559596, BE541445, AW132115, AA604875, F26535, W45039, AW003866, AI500061, AI590043, AI688848, AI624293, AW020710, AI863002, AW020932, BE909551, BF673434, AW195253, AI491904, N75779, AI572717, AI524654, AI309306, AW166638, AI310575, R66759, AA449768, AW081343, BG171779, AA830396, BE962830, AI869377, AI559752, AI310582, AL042753, AW020693, AI355779, AI581033, AI340533, BE887861, AL037602, AI263584, AW168708, AI819976, AI669640, AI818980, AI621341, AI868204, AI597748, AI499325, BF909758, BF337602, AL009172.1, AB016194.1, BC000720.1, BC008890.1, AF092737.1, AJ012755.1, AC069298.8, AK027188.1, BC008364.1, AB063084.1, AL136889.1, AC004213.1, BC009026.1, BC001675.1, BC002688.1, AK000501.1, AL137705.1, AB050533.1, AL389951.1, AL050393.1, BC001963.1, AL389935.1, AK026865.1, AB050410.1, AL133623.1,</p>

					AK000489.1, BC002481.1, BC007241.1, BC003682.1, BC002523.1, AF217982.1, BC008840.1, U51587.1, AL136748.1, AL499604.9, BC005402.1, BC008078.1, AL080126.1, AF061573.2, AL133325.20, BC004960.1, BC001294.1, AL137478.1, AK025435.1, AB048954.1, BC002733.1, Z94277.1, AC005291.1, U66059.1, D83989.1, U95739.1, AF168787.1, AL137463.1, AB050534.1, BC006345.1, BC002574.1, AC008014.5, AL353802.14, BC006480.1, S76508.1, AL133665.1, AP001434.1, AC005353.1, AP000020.2, AP000161.1, AC012502.3, AL022147.3, AC005048.2, AC005968.1, AL157360.8, AL162713.19, AC025754.4, AL391873.15, AC006222.1, AL359997.8, AC009144.5, AC007056.4, AC008592.4, AP001731.1, BC003683.1, BC009395.1, AB063074.1, AL136915.1, AK024747.1, S77771.1, BC008673.1, BC007417.1, AL133070.1, AK026590.1, AF217987.1, BC002524.1, AK027204.1, AL512718.1, AF369701.1, AL137292.1, AL137658.1, BC000860.1, BC003056.1, AF091084.1, AL117438.1, AF038847.1, AL117587.1, AK027103.1, BC007456.1, AL117460.1, AB055303.1, AB060887.1, AL023657.1, AK000647.1, AC007597.3, BC003637.1, BC006251.1, AK026642.1, BC002355.1, AF141289.1, L30117.1, AK000247.1, AK024855.1, AL136765.1, AL137547.1, AL080137.1, BC008417.1, AC010972.3, AL121932.19, BC004943.1, AK026649.1, AK027111.1, AK026542.1, X82434.1, BC002365.1, AK027102.1, AF358829.1, AF073483.1, BC002541.1, BC006196.1, AL080139.1, BC004310.1, BC006458.1, AF124728.1, AK025254.1, AF321617.1, AK026551.1, AK024545.1, BC002476.1, AL161427.16, AL137537.1, AF110329.1, BC003052.1, AB048913.1, BC008429.1, BC002914.1, AK026164.1, AL133640.1, BC002970.1, AK025798.1, AB060869.1, BC003548.1, AK027614.1, BC008751.1, AL137548.1, AL355795.13, AC010088.3, D55641.1, BC006119.1, AB050407.1, BC002752.1, BC002519.1, AB060877.1, BC004222.1, AK025414.1, BC003569.1, BC002631.1, BC002448.1, AB055368.1, BC006093.1, AL353940.1, AF002672.1, AL354828.12, AC019176.4, AL049276.1, AK026593.1, AF026816.2, AB050411.1, AL390154.1, AK000137.1, AF054988.1, AB049900.1, BC008488.1, AK027173.1, AL389957.1, AL137538.1, AB047869.1, AB060888.1, AL136893.1, AF125948.1, AB063087.1, AL096728.1, BC006161.1, BC001844.1, AK027136.1, AL137479.1, AL110280.1, AL137267.1, U67211.1, AL390167.1, AF334536.1, BC003687.1, BC003587.1, D44497.1, BC003110.1, AK026793.1, AB060861.1, AB048921.1, AL390079.1, AB060903.1, AK025391.1, BC001217.1, AL359600.1, AB047609.1, BC003602.1, AJ012582.1, AL512719.1, AF179633.1, AK026857.1, AC003032.1, AC025735.4, AC023880.5, AL096776.12, AL034374.2, AC010137.3, AC007719.7, AL109800.25, AL360297.12, AL022170.1, AC006338.5, AC021020.3, AC026888.6, Y14040.1, AF261134.1, AK024524.1, AK000753.1, AK000450.1, AF042090.1, AJ001838.1, U92992.1.
HPIAQ68	459	833082	1 - 2452	15 - 2466	W89022, W89021, AA400091, AA480871, AA480928, AA400180, H72944, H72544, AV731860, N62805, A1827122, A1742541, A1820089, A1650350, A1499934, T17487, A1922817, A1590848, A1679031, BE141338, AV720191, M85961, BE093537, AW893527, AW893524, AA909164, BE093538, BF222081, AL049831.2, AL138776.10, AC004825.2, AC005539.1, AC008151.1, AC006152.3, AC008085.1, AL139141.22, AL133512.10, AC073310.7, AC002069.1, AP003547.2,

					AL353133.7, AC011716.7, AC004070.1, AL391559.13, AC011286.7, AL133238.3, AC026116.26, AC002068.1, AC007463.3, AC007632.4, AC080011.21, AL035409.15, AL096888.30, AL136130.7, AL391557.11, AL512272.15, AL109913.20, AC009302.2, AL356750.16, AC006324.3, AL133342.14, AL590635.7, AL160008.3, AC007253.2, AL035070.3, AC025577.15, AL035451.5, AC016902.4, AL445240.8, AP000802.4, AC012152.12, AC009757.8, AC016648.5, AC026441.4, AC000122.1, AC024028.10, AL139112.9, AC019197.7, AC010738.4, AC015933.8, AC007631.3, AC010351.6, AL034409.4, AC012081.16, AC024603.5, AL079352.3, AL442166.1, AL137861.5, AL163284.2, AC008170.2, AL008729.1, AC040171.3, AC006034.2, AL355537.11, AC009496.3, AL445225.9, AL365400.19, AL022154.1, AF001552.1, AC007639.5, AC005083.1, AC006925. 6.
HPIBO15	460	131086 8	1 - 1725	15 - 1739	AI056404, AI802391, AW270724, AI750249, N41425, N47678, AI188511, AI376981, AA029314, AW452123, BE466507, N39755, AI937190, AA063620, AA693737, AI139466, AA701241, AI250789, AI672263, AI198257, BF055537, AI199035, AA677064, W69895, AA040154, BF196981, W73711, AA029867, W69841, BF222273, AW900121, AW022270, W69574, AI373227, AI200161, AA701858, AV690112, AW044223, W69662, AI052153, AA872860, H29417, H29324, N26312, AI283749, AA036704, AI383659, AA332627, N47677, AI424682, BE089934, AA329748, AW952484.
HPICB53	461	104230 9	1 - 1125	15 - 1139	AI284640, AL079734, AI345695, AA410788, AA128592, AV760508, AA449997, AU147162, AV756491, AW302315, AI801482, AW265385, AW021583, AW265393, AI733856, AA521323, AW963117, AW327624, AV763026, AV763058, BE150796, BG059568, AV759204, AV760915, BF827410, BE147833, BE062478, AW969941, AW062724, AA634786, BE063437, AA521399, AV764259, AV763971, AW270258, AI491765, AA666332, AW302909, AW504485, AW974932, AI908093, AI753488, BG236735, AW963463, BF681619, AA581903, BE139267, AL120343, BF804385, BE062476, AI669589, AW402458, AW189068, BG236628, AV759632, AA584489, BF989483, AI610468, AI244127, AW467323, AW271904, AW630298, BE872393, AV759274, AW805539, BE393367, AW189113, BE139358, AW970877, AI732483, AI754037, AW845366, AA468022, AI251576, BF030641, AV761519, AA643770, AW237905, AA284247, AW084445, AW148507, AW439558, AI612142, AI358384, AI471691, AU118374, AL040054, BF750422, BF761328, AW020992, AA469327, AU147922, AA469451, AA704393, AL037910, BF736198, AW503900, AV758903, AV703785, AL038936, BF944940, AL048616, AA483256, AW021917, AV762395, AW062682, BF965775, AV713243, AA916430, AA857296, BG029528, BG009317, AI708009, AV762982, AW268232, AI306232, AA661948, AV744179, BE062545, AA515048, AI583466, D83989.1, AF077058.1, X75335.1, X55926.1, X55931.1, AC018690.5, UI18398.1, AP001208.3, AC005399.19, AL096755.1, AC018494.6, U02531.1, AP001330.3, AJ003147.1, AL121586.31, AL137792.11, AP000251.1, AC018511.4, AL356915.19, AL133347.28, AF091512.1, AL160163.24, AC002316.1, AL022336.1, AP000212.1, AC011471.6, AC018695.6, AP001711.1, AC006487.8, AP000030.1, AP000134.1, AC005037.2, AF288742.1, AC005342.1, AL050318.13, X76070.1, AC011462.4, AC004126.1, AC006435.7, AC074331.1, AC005089.2, AL162718.15, AC072052.6, Z96568.1, AC007272.3, AL033529.25, AL163636.6, AC009228.4, AC005520.2,

					<p>AP001760.1, AC006333.3, AL096817.12, AC005519.3, AC005215.1, AP000557.2, AC005207.1, AC005102.1, AC005088.2, AC006077.1, AC004531.1, AL353140.12, AC009068.10, AC087225.1, AC004841.2, AC004583.1, AC009131.6, AC002996.1, AC002301.1, AL022323.7, AF205588.1, AC007957.36, AL449212.1, AC019206.4, AC010913.9, AL109797.18, AL078621.19, AL034417.14, M87898.1, AF317635.1, AL157823.9, AP001759.1, AL031658.11, AC002036.1, AL035555.10, AC068319.4, Z93023.1, AC007383.4, AL136979.16, AP000501.1, AL138499.4, AC000073.1, AC024576.5, AP001753.1, AC010422.7, AB001523.1, AP001717.1, Z85987.13, AC005593.1, AC006509.15, AL122004.17, U73023.1, AL031681.16, AL157372.18, AL158830.17, AC007308.13, AL139378.15, AC026185.3, AC007546.5, AC005740.1, AL138692.26, AC007421.12, AC006992.2, AL356532.9, AL137784.14, AL034420.16, AL445664.14, AC005522.2, AP000556.2, AC010363.6, AC007707.13, AC006511.5, AC023490.5, AC004821.3, AC011472.7, AC018633.2, AC005531.1, AL133448.4, AC004103.1, AP00115.1, Z82182.2, AC012450.9, AP002810.3, AL161454.10, AC010458.5, AC009756.9, AL031596.7, AL136984.20, AC009309.4, AC026439.3, AL159970.16, AP003357.2, AL121826.11, AL035450.1, AJ009610.1, AL139353.3, AL050404.3, AC090942.1, M63796.1, AL356796.16, Z84469.1, AL033528.19, AC079175.24, AC004826.3, AC004921.1, AC026161.4, AC083871.2, U91323.1, AC000085.5, AC004824.3, AC022415.5, Z84486.1, AC006130.1, AL590031.6, AL109952.15, AL136452.7, AL353748.13, AC009086.5, AC006195.1, AP001101.2, AC004967.3, AC023869.5, AC018808.4, AP001060.1, AL158823.11, AC006483.3, U47924.1, AL132772.14, AF196969.1, AL590762.1, AC010150.3, AL136303.15, AL391595.14, AC073193.10, AC008946.6, AL031291.3, AC005387.1, AL136992.22, AL136172.16, AF312032.1, AC009087.4, AL355392.7, AC024028.10, AC005057.2, AC005231.2, AC002350.1, AC034198.6, AC022201.4, AC067722.21, U29895.1, AF053356.1, AC024166.3, AF336797.2, AC007637.9, AP000306.1, AL445532.8, AC025280.4, AC004662.1, AL021939. 1.</p> <p>AP001206.3, AP001329. 3.</p>
HPJBK12	462	101146 7	1 - 2634	15 - 2648	
HPJCL22	463	114667 4	1 - 3093	15 - 3107	<p>AU140137, AW273142, BF511622, AW500031, AW997852, AW997845, AW997846, BE263631, AW997843, AI457507, AW449421, AW451219, BE047152, BF946370, BF439925, BF946380, AI200349, BF897509, BF512501, Z19075, BE827516, BF094042, BF094020, BE244735, AA325330, AW962065, R31240, AI023715, AA736958, BF802328, BF988285, BG015997, AA215423, BF736763, AW997844, AA285156, AI254765, BF902055, BF724699, AV740801, AA847952, AA634889, AI284640, AA074818, AL134972, BF724366, AW274349, AV763138, AA468131, BF946053, BF945647, AV729809, AW303196, AI801148, AL038072, AA873777, AL133662.1, AB020720.1, AB051126.1, AK023742.1, AC020916.7, AL512802.2, AC005098.2, AL109758.2, AK024937.1, AL096701.14, Y11535.1, AL080243.21, AL137073.13, AL137059.20, AL590709.5, AP002378.3, AL158210.12, AC006064.9, AC002563.1, AP001064.1, AC017016.5, AC004836.2, AF238380.1, AL021918.1, AC018641.3, AL136162.17, AL035460.15, AC084356.22, AC005943.1, AL157877.11, AP000760.4, AC021752.5, AC011446.6, AL121895.26, AL451075.15, AC011308.8, U67829.1,</p>

	464	589969	1 - 1452	15 - 1466	AL034429.1, AL049776.3, AC003043.1, AF059321.1, AP001748.1, AC074115.4, AL133622.1, AC016138.8, AF052144.1, AL136295.3, AC005007.1, AC018618.5, AC026672.44, AC016597.4, AL136305.14, AL352979.4, AL133545.10, AL360169.17, AL031587.3, AC026184.3, AC074121.16, AC044797.5, AL117382.28, AL358293.4, AC007546.5, Z95152.1, AK022069.1, AC010618.7, AC011470.5, AL157912.5, AL022721.1, AC004084.1, AL157789.6, AL137495.1, AC005015.2, U07562.1, AC073492.18, AC005144.1, AC008635.6, AL035704.9, AC067722.21, AL121829.30, AE006464.1, AL590763.1, AL049610.9, AL137244.28, AL162272.10, AF254983.2, AP002371.3, AC010527.5, U73023.1, AC020904.6, U91322.1, AC012306.11, AL352984.4, AC020955.6, AC018523.9, AC004928.2, AF015156.1, U95739.1, AC027319.5, AL138717.6, AL163201.2, AC008555.5, AC011497.6, AC019206.4, AC007005.3, AC018504.4, AC020552.4, AC068313.4, AC004867.5, AL355392.7, AL021397.1, AC010312.4, Z97630. 11.
HPJCW04	464	589969	1 - 1452	15 - 1466	T81065, H59556, T70276, H59557, AC002519.1, AL136123.19, AC090051.8, AL021579.1, AC010202.6, AC025589.20, AC022267.8, AL359272.9, AC022148.5, AC009756.9, AC078962.30, AL356121.13, AC007880.2, AL137793.16, AC002059.3, AC008450.5, AC010654.8, AP003114.1, AC007226.3, AL033519. 42.
HPJEX20	465	135242 0	1 - 552	15 - 566	AW938132.
HPMAI22	466	635491	1 - 1260	15 - 1274	AI540210, AW173208, AW006589, AV707182, AW104434, BE503183, AI148598, AI656207, AI350808, BE503507, AW297121, AW237250, AA918535, BF057772, AA918200, AI357673, AW235193, AW083055, BE503001, AI350807, AI200477, AI991567, AA953496, AI825590, AA738163, AW962712, N59298, AA369466, H71562, AA369367, AA369366, H71045, T48746, H71557, AL354716. 9.
HPMFP40	467	638165	1 - 1203	15 - 1217	U48436.1, AC005731. 2.
HPMGJ45	468	798102	1 - 1642	15 - 1656	AI800816, T70609, AA001037, T70876, AW295609, AI174704, AA488148, BE818897.
HPQAC69	469	396804	1 - 976	15 - 990	BE825496, Z21226, AL159154.16, AF075587. 1.
HPRBC80	470	829136	1 - 2529	15 - 2543	BF508706, BG251902, BG118348, AL522364, AI690187, AW959485, AV705315, BF672789, AL520227, BG176557, AL528876, AV713609, BE439925, BF130665, AW963928, BF994344, AL536566, AA446397, AA180531, BG026529, AA180520, BF672895, BF029282, BF670440, BF799935, BF510400, AA179618, AL513906, BE246173, AA625572, BE244085, BF671786, AI681635, BE004437, AA431963, AV701964, BE566300, AV653358, BE004444, BF790083, Z30124, AA164383, C17250, AA379401, N24451, AA363823, BE004648, AA180509, AV713647, T35331, AW961450, BF800059, AV686722, BF575322, AW020971, BF229438, AW361378, AA465249, AA313690, BF979498, BE694196, AW999825, T35345, AA625571, BE925937, T30431, AI135096, BE172414, BF980120, N54675, AW897938, BF210564, AW665936, AA769851, Z20951, AW242738, Z19798, C16481, AW197150, AI567621, BE222028, BE622950, AW883664, AA885770, AI039327, AA628005, N50019, AI650889, AJ271835.1, AF136972.1, AC013717.8, AJ271832.1, AF294792.1, AI005801. 1.

HPRBF19	471	753282	1 - 1447	15 - 1461	<p>AW582253, AW469181, A1799626, BF375244, AW469177, A1921465, AU157797, A1697014, A1346622, AW029127, C05837, A1830044, A1285194, AA172076, A1281230, A1285227, AW452356, A1278830, BF508192, A1283827, AA172244, BF375243, AA612697, BF378919, AW589436, BE183571, AW365013, A1264367, C00562, AW869793, BE002927, A1473464, A1925050, A1362363, A1270207, AA371314, AU138880, AW814058, A1476009, AA314891, AW008169, A1571538, BE814188, AK023655.1, U91321.1, AC003108. 1.</p>
HPTTG19	472	635033	1 - 545	15 - 559	<p>AA98657, AA493232, AW964196, AW945159, AW950095, AW963925, AW949384, AW951182, AW952751, AW949383, AW962651, AW963933, AW964422, AW958763, AW956474, AW960718, AW964284, AW967195, AW960207, AW954032, AW957083, AW959366, AW949682, AW962713, AW958568, AW958569, AW949767, AW951201, AW963026, AW949757, AW957085, AW949750, AW953772, AW954070, AW960237, AW957062, AW949697, AW967372, AW955902, AW958365, AW950217, AW954506, AW966270, AW964223, AW958756, AW955977, AW955982, AW951187, AW949856, AW951437, AW953773, AW962636, AW952126, AW957059, AW964421, AW954068, AW949551, AW949863, AW962650, AW950219, AW961026, AW963025, AW964203, AW949552, AW957068, AW958225, AW960720, AW951452, AW966421, AW962648, AW964012, AW958740, AW959899, AW955892, AW959356, AW949761, AW949762, AW964198, AW951430, AW963027, AW964420, AW963915, AW953657, AW955900, AW945197, AW965978, AW956278, AW951409, AW952743, AW951624, AW951197, AW949764, AW957061, AW964224, AW949850, AW962649, AW962644, AW964423, AW953769, AW965895, AW949759, AW963931, AW963940, AV706741, AW953807, AW945155, AV707067, AV707786, AV702794, AV705836, AW961247, AV707234, AV727499, AW955724, AW965899, AW956626, AW965869, AV704974, AW965866, AW957677, AW961052, AV702716, AV725181, AW951184, AV709772, AV705660, AW965033, AW963011, AV703239, AV702990, AV661286, AW950678, AW963962, AW961400, AW963598, AV704490, AW959270, AW956792, AW952418, AW950240, AW966389, D50992, AV705590, AV704497, AV706871, AV704891, AW963631, AV688823, AV701911, AV693604, AV705273, AV695888, AV727353, AV707576, AV703275, AW964074, AV705282, AW967052, AW951738, AV703453, AV707368, AW954228, AV709635, AV687035, AV708304, AV701769, AW961255, AW960629, AV702964, AV707331, AV707197, AW949517, AV703742, AV705710, AV701667, AV726551, AV652860, AW953804, AW957674, AV709248, AW951768, AV728539, AW953797, AV728953, AV649758, AW954697, AW963405, AV704785, AV705453, AV708872, AV727314, AV654686, AW963087, AV706876, AV703457, AV706453, AV709527, AW950520, AV701730, AV705909, AV728282, AV707059, AV702637, AV703591, AV704124, AV702306, AW962983, AV705757, AW951773, AW959804, AV728999, AV709596, AW950671, AV729532, AV708610, AW963700, AV706579, AV707909, AW950006, AV707238, AV709725, AW964490, AV706910, AV729198, AW961313, AW956618, AW956619, AW956624, AW958455, AW955710, AW964429, AW950778, AV726337, AV703553, AV704376, AV656478, AW959846, AW958161, AW952328, U73636.1, U94592.1, Z30183.1, U45328.1, AB005666.1, Z79435. 1.</p>

HP TVX32	473	634353	1 - 789	15 - 803	AI862453, AI590769, BE301273, AI569794, AI800423, AI859970, BF982756, AI653897, AW170296, AI811162, AW467390, AI653548, AI652421, AI569595, AI739622, AW276481, AW473524, AI963681, AI701477, AI657090, AA973284, AI624062, AA884426, AW007927, AI671878, AW300934, AI150198, AI597690, AA687348, AW964953, AW772043, AW205152, AA398522, HI16789, AA639818, BE856046, T72002, BE939495, AW518068, AW079395, AW510732, AI283535, AI028345, AI208208, AA847299, AW025171, AI204112, AI869844, AW235822, BE313614, AI521850, R48787, AI917108, T87641, BG236404, AI760407, F09217, AA835697, AW009374, AI200294, AW136297, AW578241, AA609623, T51196, AA132853, AI222636, T03597, T80196, AA046518, BG181058, AI648526, AA046693, AW196234, T51302, AA297158, BF591885, AI784267, BF222991, AI656095, AI539547, AI673418, T64280, AA160800, R50052, BE892957, AA927052, AW194685, AI283529, AW274852, AA292781, AA298687, AI247295, BE386015, BF348744, BC009302.1, AK026044.1, AF288687.1, AB058728.1, AF060515. 1.
HPVAB94	474	526749	1 - 805	15 - 819	BF370024, AW449056, AF131217.3, AL163247.2, AF165147. 1.
HPWAY46	475	100156 0	1 - 1400	15 - 1414	AW857326, AW861371, AV661974, AW857769, AW861551, AV661986, AW937024, BF130874, BE067001, AW861563, AA460256, AA908484, AI804404, AA235344, AI827237, AW833214, AI682922, AI306704, BF382808, AW151460, AW294348, AA336017, AI553689, BE066930, BF914075, AI016721, BF507352, BF114874.
HPWDJ42	476	722246	1 - 1326	15 - 1340	AA651639, BF668217, AL046409, BF677892, AA581903, AW518220, AW303196, AW301350, AW274349, AI119691, AW964231, AW327624, AI696955, BE160727, BG059568, AA521323, BF130605, H05940, BE910362, BF769368, AW979060, AI281881, AW858127, AA521399, AA148672, AW965008, AL042853, AV734666, AV762033, AA167055, AV761519, AW513362, BF965007, AW975012, BF724699, AW270382, AC006262.1, Z69714.1, AL109952.15, AL109897.30, AC008760.6, AC005939.1, AC004687.1, AL158040.13, AC011737.10, AC008745.6, AL050321.11, AL034420.16, AC004854.2, AC007216.2, AI400877.1, AC004150.8, AL117692.5, AC004033.3, AC068799.14, AF015151.1, AF015156.1, AC007731.14, AC080012.20, AC010422.7, AL358354.16, AC053467.1, AL118502.38, AL121969.12, AL035079.14, AC005921.3, AC005209.1, AC005098.2, Z95115.1, AL121989.12, AL354720.14, AL033529.25, AC004417.1, AC010328.4, AE006639.1, AC004166.12, AC008750.7, AL049761.11, AL096701.14, Z99716.4, AL139317.5, AL024509.1, AC002418.1, AC005500.2, AC018809.4, AL133245.2, U95742.1, AC010203.13, AC008626.5, AL022316.2, AC007030.3, AC004386.1, AL353748.13, AL022329.9, AL121928.13, AL139353.3, AC012368.6, AL591398.2, AL355334.26, AC004821.3, AC004590.1, AL135901.23, AC084864.2, AC023160.31, AL359402.3, AP000212.1, AP000134.1, AL109984.14, AC007510.6, AL359235.3, AC006480.3, AF312032.1, AC009086.5, AC022308.17, AC009298.3, AP003357.2, AL359846.11, AL390074.17, AC005368.1, AC011895.4, AC005040.2, AC007963.7, AP002851.2, AL365225.12, AC022383.3, AC022596.9, AC023892.35, AL137784.14, AL359541.11, AC006948.4, AC005252.1, AF279660.2, AC010319.7, AL021807.2, AC007620.30, AL109933.25, AL078477.5, AF348209.1, AC009961.11, AC009996.7, AC006511.5, AL136137.15, AP001729.1, Z98036.1,

					AC006345.4, AP001671.1, AL355096.4, AL355512.22, AC006483.3, AP001700.1, AL109825.23, U96629.1, AC009228.4, AL138976.5, AL136980.5, AB043547.1, AL359091.10, AC010530.7, AC004771.1, AC007308.13, AL157369.7, AC011452.6, AC005037.2, AC005666.1, AL138807.12, AC008882.6, AC006435.7, AC022148.5, AL133453.3, AC012072.2, AC007488.15, AC002045.1, AC005553.1, AC003982.1, AL022476.2, AL121655.1, AP001038.2, AC017067.4, AL137141.10, AC002351.1, AL109743.4, AC009244.24, AC005821.1, AC004253.1, AC069277.5, AC007383.4, AC021752.5, AL034555.2, AC006571.12, AP001711.1, AC004955.2, AC006509.15, AC026179.5, AL122035.6, AF190464.1, AL023494.12, AL356515.17, AP000553.1, AC022211.5, AC026368.37, AC012309.7, AC004477.1, AL135818.3, AC011900.6, AF030453.1, AC069475.27, AC024154.2, AL139100.9, AC019060.5, Z98941.1, Z85986.1, AL049636.22, AL135927.14, AC007227.3, AF244812.1, AP000306.1, AP000246.1, AL136301.21, AC087590.1, AP001619.1, AC005971.5, AL049709.18, L44140.1, AL355916.2, AC010583.5, AL138692.26, AJ295844.1, AC011500.7, AC011515.4.
HPZAB47	477	585702	1 - 1662	15 - 1676	AW993896, AA493291, AA526359, AW972615, AI720194, AA358397, AW204400, AA508549.
HRAAB15	478	658717	1 - 1733	15 - 1747	BG111918, AI823987, AI807761, AW165961, AI418806, AI738753, C05983, BG152897, AI439250, BF327504, AA923586, AI424510, BE003132, BF894183.
HRABA80	479	882176	1 - 1237	15 - 1251	AU147250, F24079, AI791459, AI732503, AA523577, AI791342, AU121439, BF309840, BF308519, AI659402, AA719317, AA602233, AI752815, AW967109, AV694013, AA470486, AI218622, AA644545, AK022184.1, AC005777.1, AL031431.8, AC007406.1, AC032011.14, AC004143.1, AC006131.1, AC074121.16, AC005760.1, AC005529.7, AL354766.17, AC025166.7, AC012476.8, AC005544.1, AL035079.14, AL356299.16, AL031297.4, AC005778.1, AC011666.28.
HRACD15	480	871221	1 - 1525	15 - 1539	AL519765, AL519766, BE910445, BF684654, BE270497, BE513843, BF975936, BE396890, BF973472, BE515166, BF686665, BE744708, BG257119, BE880162, BE797305, AW248552, BE514176, BE793786, BE791776, BE296702, BE271500, BE268991, AW512838, BE791090, BE727326, BF026627, BE797018, BE275277, BE277906, AU133849, AW248687, AU120611, BE270509, BF027092, BE384166, AI565668, BE513807, AW405789, AU151587, AA261853, AW043669, BE729554, AI949119, AW575486, AW751019, AI524253, BE391940, AW245114, AU145208, BE312276, BE796133, BE561087, AI953094, BE390017, AA283855, BE265439, BE391036, BE391843, AI620547, AW402545, AI075157, AI744741, BF125945, BF941740, W60104, BE266246, AW085553, AW131075, AI768378, AA401964, BE390215, AI752668, BE736619, AW967867, AI565659, BE387591, BE222775, AA283856, AW750999, AA261854, AI498229, AA830894, W60024, AA496293, AI660481, BE390924, BE277521, AA994223, AA868400, BF026241, BE382766, AI801124, BE671092, AI264882, AI355420, AW248994, BE503489, AI262893, AA583344, BE266582, AI832018, N29665, AA622755, AI439625, AI193362, BF446254, BE504260, BE387503, AW806699, AU146635, BE856089, AI087826, BF801189, AI133817, AA843858, AI287716, AA928793, AA699788, AI027345, BE728607, AW629986, W52804, T10369, AW103963, AA933691, BE138812, AI284845, AW264928, AW152071, AI265798, AI809041, AI038469, AW246086,

					AI435409, AV691151, AW957437, AI620834, AI452870, AI860541, AI475835, AI418409, AI744163, AW002187, AV692842, AI521647, AA845397, AI744800, AW002140, AI309558, AU118709, W96176, AW768771, BE207457, AW236670, AW264115, D29066, AA026580, AA135589, H55790, AW732194, BG006063, AI024919, AA256768, AI214884, AA280734, AA565467, R87509, BF056311, AA63222, AI024305, BF204467, AA077296, BF310268, W07856, T30234, R48997, AI435115, AI567828, AI537884, AW050631, AI740587, BE162565, BE149783, AW090152, T10368, AW627586, AI537596, AA622914, T50404, AW016161, W45022, AI274609, AA570075, AL039562, AA827726, AW246353, W04715, H89133, BF125722, AA626654, AW246566, AW519242, AI659744, AI752669, AW247535, AA077415, AW129363, AI202252, AA628809, BE869982, AI208476, BE206952, AW511835, AA037397, BF828156, BG031018, BE513491, BE736901, AW149144, AI189756, AA078651, BE513973, BF194732, H47888, AW954928, AA806404, AW080710, BF847605, AA077110, AA319080, AA101354, AI214676, AA434187, AA932091, BF837875, BE140453, AA428843, R11194, AA778244, AA077601, AW082443, N90686, AI675644, BF794477, W05073, AI520907, AL046053, AW298462, AA496322, T50535, BC008084.1, AK001129.1, AK021688.1, BC007488.1, AL117583.1, AC006014.2, AB014518.1, AC005488.2, Y16704.1, N54250, N81046, AA036807, AI135546, AA236044, AA262692, AA938381, AA204918, AA402082, AA455506, AA455507, AI217271.
HRACD80	481	130977 4	1 - 1927	15 - 1941	BF001770, AI431600, AI332903, AW778829, BF197765, AI814110, BF875981, BF509841, AI983390, AI741104, AI263763, AA719400.
HRDDV47	482	637650	1 - 1496	15 - 1510	BG035895, AI271436, AW510873, AW341493, AA833696, BF205827, AA280770, AW137710.
HRDFD27	483	567004	1 - 791	15 - 805	W85784, AI254961, AW767643, BG164474, AA428410, BG007947, AI625142, AI111171, AC005274.1, AC004491.1, Z68192.1, AL365225.12, AL033529.25, AC009086.5, AC008569.6, AC002420.1, AC022392.4, AC012170.6, AC008474.7, AL157912.5, AC004966.2, AC002551.1, AL035695.17, AC005184.1, AC002115.1, AC027319.5, AC020610.6, AL121777.39, AC024568.4, AC009412.6, AC090955.2, AL133453.3, AP003352.2, AL163248.2, AL118520.26, AF260011.2, AC005940.3, U95742.1, AL022396.1, AC005362.1, AC004841.2, AC007676.19, AC024578. 3.
HROAJ03	484	567005	1 - 1168	15 - 1182	AW959762, AW015128, AW753637, AV711012, AA296493, BE151396, AV655181, AI220561, BE006108, AA311800, AW962850, AW516636, BF881635.
HRTAE58	485	519326	1 - 586	15 - 600	AA372458, AC004189.1, AP000517.1, AB023054.1, AC009313. 4.
HSATR82	486	531973	1 - 763	15 - 777	BG056575, N22501, AW884147, BF903801, H59173, AW963463, BF997339, AW958318, AA374525, AW502694, BF816190, AA364420, AA378207, AA810158, AC007130.2, AL122035.6, AL353692.14, AF124523.1, AL391122.9, AL035404.20, Z93241.11, AC007917.15, AL353680.8, AC005881.3, AC005740.1, AP002851.2, AL133477.16, AC004805.1, AC008891.7, AL390882.12, AL031602.14, AC005015.2, AL133479.11, AC005920.1, AL136228.8, AL139317.5, AL137792.11, Z84487.2, AF205588.1, AC007782.20, AD000092.1, AC025594.5, AL109804.41, AJ009612.5, AP000557.2, AC072061.8, AC083884.6, AC005529.7, AL133243.1, AL096791.12, AL137802.7, AI133410.31, AF243527.1, AC005399.19, AB026898.1, AC004883.2, AL392166.19, AL050318.13, AP003357.2,

						AC009331.5, AC011455.6, AC004965.2, AL139021.6, AC024603.5, AC005914.1, AL121809.6, AC069262.24, AC004867.5, AC005519.3, AC069025.4, AC008088. 8.
HSAUK57	487	772554	1 - 1023		15 - 1037	AC008860.6.
HSAUL82	488	490879	1 - 713		15 - 727	AI801272, AW510484, AW938669, AW963599, AW964519, AV703063, AW962942, AW967052, AW961606, AW967329, AW961841, AV727589, AW962648, AV725024, AV726532, AW963592, AW963349, AV728841, AW950748, AV728138, R47506, AW962444, AV707331, AV707907, AV687010, AW963895, AV704876, AW963486, AV702738, AV702975, AW954242, AV742541, AV702107, AW963608, AW964860, AV688658, AV708167, AV704541, AV652563, AW964213, AW957644, AV721745, AW962321, AV691793, AW962155, AV707237, AV703844, AW963652, AV702172, AW962136, AW963498, AV707135, AW961299, AC012076.4, AL049780.4, AC008736.6, AC008395.6, AP002841.2, AL160269.14, AC004166.12, U95742.1, AC007216.2, AL121972. 17.
HSAVH65	489	545459	1 - 586		15 - 600	BF793712, AW080832, AI693734, BE869501, AI564525, BF037343, AW475057, AA523950, AV719716, AW024144, BF827012, AI185475, AI197788, AV660309, AI708671.
HSAVK10	490	561435	1 - 1228		15 - 1242	AI821931, AW303196, AW301350, AA397389, AI821714, AI792133, AI791913, AI821785, AI755057, AI336054, AI357823, AV760453, AI291823, BE328573, AI369580, AI039809, AW872676, AI479148, AI59645, AV762354, AW327961, AW872575, AW079761, BF347791, AP002851.2, AF224669.1, AC012066.10, AL035420.15, AL354707.17, AL078581.11, AF001549.1, AC007739.2, AL391839.9, AL135778.9, AC018690.5, AC005028.1, AL022238.1, AL139343.9, AC011452.6, AP001718.1, AP001671.1, AP001972.4, AC003969.1, AL049541.24, AC006011.2, AC005005.1, AP001694.1, AC005914.1, AC004913.2, AF196969.1, AC090051.8, AL133453.3, AC008511.6, AL354720.14, AL121981.17, AC005531.1, AL355499.15, AC073581.23, AC007256.5, AL096791.12, AP000553.1, AL133320.8, AC090527.3, AL160237.4, AC005859.1, AC003691.1, AL357992.14, AC023469.6, AC004554.1, AL445143.2, AC024075.4, AC005701.1, AL137072.8, AL139415.10, AC016656.5, AC016652.5, AL163248.2, AL449264.18, AC023795.18, AC006203.1, AL353135.32, AF314058.1, AC004104.1, AL136300.22, AL136358.13, AL590762.1, AL389888.8, AP000692.1, AC006946.20, AL035458.35, AL022318.2, AC005157.1, AC020728.4, AL136139.6, AC021810.7, AC005071.2, AC068724.7, Z84572.1, AL021578.4, AL450263.15, AC008840.4, AL355103.3, AP001709.1, AC005962.1, AL163281.2, AL138820.11, AC006329.5, AC005291.1, AC009481.4, AL034380.26, AL161747.5, AL117356.5, AL163282.2, AL008639.15, AC002990.1, AC008591.6, AC005519.3, AC003683.2, AP001706.1, AC008271.6, AP001670.1, AL133246.2, AC010203.13, AP000555.1, AC008945.6, AC026749.5, Z83826.12, AL139350.17, Z98050.1, AC010422.7, AL139801.17, AC011451.6, AL133355.12, AC026866.8, AP001725.1, AP001712.1, AL009182.17, AF111167.2, AL161804.4, AL022162.1, Z93023.1, Z97989.1, AC022116.5, AC005089.2, AP001667.1, AC007277.2, AP000642.5, AC013416.4, AC010543.8, AC002527.1, AL121755.23, AL034372.33, AL122021.3, AC013471.7, AC006040.3, AC006001.2, AL138706.9, AC034305.6, AL133396.2, AC006430.22, AL162464.5, AL353764.9, AP000901.5, AC006211.1, AL163218.2, AC007991.7, AB053170.1, AC022217.5, AP001705.1, AC004847.3, AL049762.20, AC004914.1, AC083855.2, AL136305.14,

					AL121893.21, AC004129.1, AC026463.4, AC005077.5, AP000359.1, AC008134.3, AC006059.3, AL354864.16, AL135932.7, AC016543.6, AC006448.14, AP000512.1, AC004131.1, AL137061.12, AF317635.1, AC004757.1, AP001692.1, AC006139.1, AL359951.4, AC027130.5, AP001685.1, AL031311.1, AL157777.5, AC005668.1, AC005252.1, AC083871.2, AC005412.6, AC008274.3, AC018636.4, U91321.1, AL139317.5, AL049870.3, AL158830.17, AL133500.3, AC010735.11, AC010884.10, AP001720.1, AL117352.12, AL355834.4, AP001666.1, AC006965. 3.
HSAWD74	491	460527	1 - 956	15 - 970	BG056446, N32720, AW152171, AA339555, AA076697, AA525291, AA380007, BE734992, AA077031, AA379882, BE047929, AA515728, AI282253, AA683069, AW275432, AW274078, AA533025, AI675615, AL040054, AA644090, AI345123, N42169, AW023111, AV756491, AI962030, AV758870, AW021774, AA602906, BG222564, BG222326, AV762454, AL048060, AA225406, AI879951, AA078830, AW514006, BE063437, BF725844, AI591299, AI590522, H68343, AA825827, AA559166, AW272294, BF213224, BE049095, AI344810, AA714011, AW502237, H63660, H24331, AA171400, AL449689, AI753113, F18888, AA282951, AV761486, AW193493, AA669238, AI557644, AI049868, AW631267, AA525331, AW117740, AA507623, AA862183, BE968744, BE677164, AW571963, AI433952, BF991881, AA701080, BF970107, BF212465, AA832175, AA470933, AW157128, AI343144, AW974751, AW338376, AW410409, AW844636, AW664505, AA827383, AV760014, AI745116, AI003611, AV683406, AW021154, AW501278, BE968477, BF991882, AI189682, AU124213, AI336637, AW572140, AA610644, AW963463, AA708322, AA489390, AI887235, AC004084.1, AC004951.5, AP000252.1, AP001711.1, AC006160.9, AP000031.1, AC022383.3, AC009131.6, AL354864.16, AL121900.26, AP000212.1, AP000134.1, AL031281.6, Z99716.4, AC009144.5, AC005015.2, AL137852.15, AP001207.3, AL035458.35, AP001753.1, AC026794.4, AL139022.4, AC009179.17, AL033383.26, AC090498.2, AC011472.7, AL162578.13, AL590762.1, AL117380.28, AF045555.1, AE006467.1, AC006088.1, AL096701.14, AL137881.12, AC011491.5, AC018828.3, AC005081.3, AC034193.4, AL110115.38, AB001523.1, AL023586.1, AL022237.1, AP000348.1, U91322.1, AL049591.12, AL133367.4, AC018808.4, AC091529.1, AC005666.1, AC011497.6, AL450339.5, AC004655.1, AP001718.1, AC005052.2, AC026866.8, AL136228.8, AC005793.1, AL139317.5, AL354720.14, AC004129.1, AL035461.11, AL161727.15, AF217413.1, AC007371.16, AL049539.21, AL008729.1, AC000353.27, AC003962.1, AC005940.3, AL158830.17, AF001549.1, AC004263.1, AC006441.13, AP000345.1, AC011811.42, AE006640.1, AL035086.12, AC004777.1, AC055120.5, AC002430.1, X02571.1, AC009477.4, AC006285.11, AC006597.2, AC018663.3, AC011479.6, AL139193.4, AC005692.1, AC009220.10, AC005907.1, AC007384.3, AC005049.2, AC004913.2, AC010328.4, AC005701.1, AC016025.12, U59962.1, AP003357.2, AC006345.4, AC006241.1, AL356805.5, AC004089.25, AC009247.12, AC005520.2, AC004910.1, AC027319.5, AC011495.6, AC008126.9, AC008521.5, AC005231.2, AC006449.19, AC002554.1, AL138720.19, AC011485.6, AL138875.8, AC008747.5, AC002994.2, AC003029.2, AC005291.1, AC006430.22, AL121712.27, AC078962.30, AL359082.16, AC004647.1, AC002429.1, AJ277546.2, AL133351.33, AL355102.5, AL391827.18, AL137140.12, AC004812.1, AC005098.2,

					AL390878.6, AL512883.5, AC009058.1, AC004883.2, AL135924.11, MI2901.1, AL109984.14, AC018758.2, AL133477.16, AC012170.6, AC026185.3, AC005736.1, AC090426.1, AF283320.1, AC012499.7, AC011446.6, AC005288.1, AC005355.1, AC006581.16, AL162430.15, AL133500.3, AL109865.36, AC010271.6, AL445195.4, AC005005.1, AC003043.1, AL1354815.10, AC083884.6, AC008755.6, AL021579.1, AL354935.23, Z81364.1, AL109925.11, AL139339.22, AC004876.2, AC020983.7, AF195658.1, AL022727.1, AC005598.6, Z93930.10, AC011480.3, AF312915.1, AC005220.1, AC074121.16, AL139123.14, AC010679.6, AC027124.4, AL157838.24, AC010205.5, AL049547.10, AJ300188.1, AL357972.18, AC002350.1, AL356095.11, AL162505.20, AL18502.38, AL022331.1, AC021016.4, AC008753.8, AC011890.4, AC005409.1, AC005516.1, Z97987.1, AC010458.5, AF053356.1, AC006111.3, AC007537.3, AC002133.1, AL390026.1, AC002319.1, AL137142.20, AP000555.1, AC005180.2, AL135838.5, AC024028.10, AL034429.1, AC007055.3, AC007298.17, AE006639.1, AL078633.32, AC066597.4, AC007766.1, AC010605.4, AC025280.4, AC005363.1, Z68870.1, AL162503.12, AP000501.1, AL355101.2, AC006208.3, AC010422.7, AC008752.6, AP000901.5, AC008569.6, AP000346.1, AL031121.5, AC005038.5, L78810.1, AC005839.1, AC005037.2, AL391374.9, Z83840.7, AC005911.6, AC004840.3, AL034402.9, AC005228.1, AL035464.20, AL355336.15, AL121920.21, AC025166.7, AC011465.4, AC005695.1, AL133448.4, AC007003.4.
HSAWZ41	492	580872	1 - 1374	15 - 1388	AL1547110, AL344906, AI318548, AV683406, AA425283, AW162314, AW409621, AI174703, AF126947, AA493546, BE139230, AV758849, BE677164, BG003974, AI065031, AA280886, AV763460, AA584360, AI251024, AW504667, AA533660, AW021674, AA493245, AW162332, AA313025, AA524604, AA557945, AW410844, AI028148, BF882222, AW069110, BG180320, AA577706, AW963552, AI890283, AU120423, AW474825, AW514844, AW023975, AI003068, AI281622, AI275989, AA601376, AI753131, AW151848, AI754926, AW662484, AA533066, AV762541, AI114543, AW265468, BE244308, AI572680, AW085811, BE747923, AV760048, AA636077, BF882223, AV764119, AA515727, AW875184, AI797998, BF970107, AW962971, AI732690, AI174827, BE049409, BE042324, AA828840, BG059139, AI921744, BF724416, AA084439, AA748071, AI446618, AW963489, BF942991, AI813920, AA807704, AI826857, AI732720, AA702637, AW439224, AI755227, AA640305, AA658443, AA804177, AI431442, H62123, AA676462, BE080768, AI114755, AA535558, AW501278, AL121039, AW631267, AI702049, AW262946, AV712092, AW403177, AW979200, N99245, BF944618, BF445745, AA601712, AW162762, AW409626, AI064968, AV732057, AW855527, BF876005, AW157128, AW148964, AA663579, AW847344, AA086042, AI859368, AI571894, AA507623, AA046906, AA554289, AW085626, AW151247, AW148821, AI821901, AI570067, BE882869, AA600127, AW103990, AA632355, AI640717, AL039436, AI828721, BF949151, AA157876, AW084152, AW960129, AA618531, AI744890, AI252005, AI038029, AI254463, BE967607, AA809125, AW771679, AW975150, AA419230, AA167656, AL046620, AI733523, AV706458, AW166996, AW022796, AV683668, AC015541.21, AC026162.5, AC018816.5, AC004953.1, L44140.1, AC008891.7,

					AC009131.6, AC020934.7, AB043547.1, AC079844.3, AL080243.21, AC008264.10, AL137792.11, AC008754.8, AP001711.1, AL139100.9, AC007376.9, AL031680.20, AP002847.2, AC005971.5, AL354943.9, AC010319.7, AC006468.9, AC005236.4, AL391119.8, AC011462.4, AC006241.1, AC018663.3, AL031296.1, AC005696.1, AL050308.9, AC011446.6, AC020931.5, AL445184.11, AC006452.4, AC005527.3, AL049869.6, AC011531.7, AC008649.6, AL022336.1, AL034405.16, AC016602.6, Z83826.12, AL022165.1, AL354707.17, AC004019.20, AC002306.1, AP001712.1, AC020916.7, AC009996.7, AL096840.25, AC004167.1, U80017.1, AC002991.1, AC006538.1, AL160166.10, AF288742.1, AL449305.4, AC010422.7, AC005000.2, AC006345.4, AL121712.27, U73169.1, AC005057.2, AC013449.8, AL121601.13, AL161624.7, AL355480.22, U91327.1, AC012476.8, AP000211.1, AP000133.1, AC011475.6, AF228703.1, Z48051.1, AC005212.1, AC009032.7, AC016894.7, AC006162.1, AC020983.7, AC006460.3, AJ009616.3, AL031847.17, AC008843.5, AF271269.1, AP000872.5, AC044797.5, AC007957.36, AC002310.1, AL391827.18, AC020896.5, AC063979.4, L78833.1, AL139286.13, AF196779.1, AL590762.1, Z97054.1, AC004895.2, AC089987.26, AL022323.7, AC002126.1, AF038458.1, AL034420.16, AL136313.27, AL162505.20, AF129756.1, AC011485.6, AL354932.26, AC009502.4, AL591807.1, AL133275.5, AL122035.6, AL031407.3, AC018636.4, AC005722.1, AP000563.1, AL050328.24, AC009314.4, AL135927.14, AC007227.3, AL021453.1, AL031427.15, AL353804.22, AL445528.16, AC010145.9, AC005529.7, AL139415.10, Z98050.1, AL136126.34, AD000092.1, AL079342.17, AC004814.2, Z82198.2, AC004821.3, AL121886.22, AC012499.7, AC005305.1, AL050349.27, AP001760.1, AC006581.16, AC067941.7, AC005484.2, AC000353.27, AC005840.2, AC073323.5, AC005921.3, AL096814.26, AC022137.5, AC090949.1, AL161747.5, AC008812.7, AP000466.1, AC004150.8, AP000210.1, AP000132.1, AC021016.4, AC000360.35, AP000213.1, AC034203.7, AL035420.15, AP000135.1, AP001870.2, AL359513.12, AL135844.9, AC006057.5, AC007900.5, AL020997.1, AC007404.4, AL117334.29, AC026776.4, AP000250.1, AP000031.1, AP000030.1, AJ003147.1, AL035659.22, AL161937.13, AL137800.12, AL022315.1, AC005003.2, AF023268.1, AF134726.1, AL359236.4, AL138880.14, AL122001.32, AP001486.4, AC008265.15, AC079602.15, AC010271.6, AC005080.2, AC011451.6, AL050335.32, AC007731.14, AL161452.19, AF075069.1, AC005500.2, AC005618.1, AL158198.14, AC007243.3, AC003399.19, AL121992.24, AC005585.1, AC011816.17, AC018751.30, Z93930.10, AC018633.2, AL138756.23, AC026464.6, AL109980.1, AC008773.7, AC073934.1, AL356257.14, AC024076.4, AC005103.3, AP000099.1, AL132713.11, AF047825.1, AC010553.6, AC010605.4, AL355495.10, AF053356.1, AC025207.5, AC005821.1, AC026391.6, AL133551.13, AL354928.9, AL138807.12, AL132642.4, AC008397.7, AC008372.6, Z93015.9, AL022721.1, AC008070.4, AL391647.16, AL136526.27, AC006211.1, AC020928.6, AP003548.2, AC078899.1, AL133294.10, AL445483.13, AL133454.6, AL513550.9, AC013416.4, AL355392.7, AP000036.1, AL161799.19, AC016250.5, AC007637.9, AC004643.1, AL096700. 14.
HSAXA83	493	545051	1 - 635	15 - 649	BE275396, BE275061, AA313781, BF977059, AI640202, AV709881, BE677876, AI291229, BE693434, AV710052, AI366963, AW137805, AI968874, AV744018, AV708132, AV688915,

					AA083495, AA336782, BG258938, BE142105, BF896038, BG031184, BE168021, BE890609, AV752295, W25439, R18412, BE903633, BC008739.1, AF164793. 1.
HSAYB43	494	604143	1 - 1685	15 - 1699	F17610, BF109566, AC026185.3, AC067941.7, AC002527.1, AC007263.4, AC006581.16, AL445237.16, AC005220.1, AL139415.10, AB045358.1, AP001711.1, AC013751.6, AC004104.1, AL109628.5, AL121986.12, AC005086.2, AC011890.4, AL512378.7, AP002532.1, AP001712.1, Y10196.1, AC005883.14, AC026672.44, AP000036. 1.
HSAYM40	495	462797	1 - 419	15 - 433	AA456872, H29988, AW966389, AW964541, AV702035, AV705869, AW964468, AV706147, AW966330, AW949645, AV704548, AL535686, AW975618, AV724520, AV718692, AW964532, AA809122, AV718489, AV727418, C14331, AW973445, C14344, C14407, AW973541, AV699927, D51799, AW966343, AV720088, AV718800, AV692290, AV720104, AV707449, AW966397, AW960483, AW973330, AV720791, AV650003, AW966062, AW966369, AV726330, AV719822, AV699550, AV722801, AW975613, AW973490, AW975623, H67854, AW975605, AW966342, AV719557, AW960081, AV718487, AW959799, AV718938, AV718633, AW966378, AV718931, AV720731, AV720533, D81111, AW965176, AV719391, Z21582, AW966399, D58101, AW960534, AW978634, N66429, D80164, D59859, D59610, D80439, D58246, D81030, D80251, D57483, D80157, AW973307, D51053, AW966059, AA305409, AW973488, AW960454, D80166, AW973474, D80212, D80268, D80366, AW950117, D59889, AW949629, AL525920, D80188, D51423, D59619, D80133, AW978661, D80210, AV720151, AW960553, D80240, D80253, AV701839, D80219, AV719945, AW973447, AV719324, AW952839, D80064, AW960473, AW950578, AV718707, AW966075, AW966386, AW966065, AV720211, AV720878, AW966368, AV720616, AV718427, AV720729, AW966032, AW966331, C14014, AW966398, AW959582, AV699447, AV700357, AV721386, AW958993, AW949498, AV723927, AV699866, D51060, AW959136, AV699715, AW949653, AW949656, AW949630, AW949631, AW949643, AW949618, AW949642, AW949657, AV700889, AW949655, AW959202, AV726423, AW966333, AL557751, AF058696.1, AB002449.1, AB028859. 1.
HSDAJ46	496	692358	1 - 1523	15 - 1537	AI800075, AI686505, AV726613, AW023374, AA418208, H97489, AA620395, AA418073, AW027850, AA401879, N67776, AI168759, N36146, AA700811, N28007, AW952793, AA012999, AW904436, H99095, AI015805, H82563, H60753, R87427, AA688368, BE702596, W03403, H59689, H83666, R85022, AL582759, AA205528, H83667, N35665, AA322820, AW072108, H60754, R07653, AA339201, H59688, R07706, N26551, N69337, H84836, N88280, BE744699, AA640177, AA221012, AA094140, AB025904. 1.
HSDEK49	497	135225 3	1 - 1768	15 - 1782	AL513706, AL513705, AV700980, BF343961, AV710516, AV716397, AV715849, BF351156, AV717025, AW071975, AI922669, AI129815, BF106386, AA702864, W32947, AV690218, AV685715, AV693576, AV686846, AV695322, AV697709, BF924861, AI168499, AI343825, AA627735, AI554367, AI335089, AV697729, AI290781, AA875852, AA442570, AV686969, AV698914, AA486920, AI357884, AI088635, W79882, R39812, AV683817, BF932594, W17367, N78991, AA972857, R62969, R59135, AW961380, R56601, BE857524, R66262, W74268, AA436814, AA813538, H05057, AA133776, Z43556, R14044, R81029, T48889, AA228697, R56602, AA142932,

						R63023, Z39624, F02373, AA993978, R66723, R67603, R59136, R80928, AA133775, AW874480, T48888, AA228698, AA368546, BF525711, AA115592, AA328299, AA486747, BG001652, AJ132502.1, AL034397. 1.
HSDE95	498	664502	1 - 560	15 - 574		BE881136, AW005333, AA631227, AA143192, AV707034, AA181022, AI301959, H98648, BF507561, AU143221, BF514388, AA594850, A1478582, AV681894, AA287457, AI393857, N75788, BE044258, AA211849, F06608, N22567, AW450628, AA563681, AW195766, AI915322, BF701252, AA186657, AA992992, AA143136, AI302352, BF035111, AA631048, AV706818, AI341927, AV703142, BF446906, BE693540, AW961036, BE676990, AI870902, AV744251, AV749732, N75929, AW887695, AA973384, AA160641, AA338837, AK024037.1, AL359596. 1.
HSDEZ20	499	135228 7	1 - 781	15 - 795		AL354891.11.
HSDFW45	500	589974	1 - 1728	15 - 1742		AA235952, AA235753, H40529, AA297145, BE139139, AI250552, BE062159, AI251034, AW970571, AI284543, AI251284, AW664460, BE138387, AW968338, AW023111, AA502991, AV655282, AI355559, BG059314, AI254770, H91062, AI244985, AI446623, BE000614, AW276678, BF131490, AI251203, AW151541, AW410354, AA584756, AV758870, AW303098, H07953, AV721136, AV723445, N55515, T74524, BF917346, AI279417, BF968874, AW328000, AI281561, AA642809, AA515048, AI587583, AI587565, T07327, AI859438, AI003611, N95817, AW865946, AV764340, AI249853, AI821764, AI732483, AA665960, AW237905, AV761107, T50676, AI066646, AL524675, BF030962, AC010000.5, AL392166.19, AC007546.5, AP000719.4, AC011811.42, AC024093.46, AL590762.1, AC018890.10, AC011247.10, AC011450.4, AC007277.2, AC002470.17, AC004821.3, AC004938.2, AL445483.13, AC010422.7, AC007263.4, AL390298.13, AC019205.4, AC003070.1, AC008805.7, AC084865.2, AC008491.6, AC019227.4, AC011449.6, AC012627.4, AL035251.11, AC005086.2, AF129756.1, AC024239.7, AC011465.4, AP001729.1, AL158207.15, AC090527.3, AL138878.10, AL353716.18, AF288742.1, AL390241.19, L78810.1, AL080317.11, AC008895.7, AP001436.1, AL121751.12, AC006345.4, AC091529.1, AL365505.15, AL035587.5, AL161757.4, AP000501.1, AP000156.1, AC006435.7, AP000014.2, AL139384.16, AC005480.3, AC005520.2, AC013449.8, AC011005.7, AC005004.3, AL359513.12, AL133153.3, AC005971.5, AC007656.2, AL138729.11, AC008764.7, AC005859.1, AL049843.18, AC010618.7, AL109936.10, AF039907.1, AL355980.6, U95740.1, AC007189.6, AL136228.8, AC011551.3, AL135978.4, AL034405.16, AL133260.12, AL109797.18, AL139785.5, AL022336.1, AC012076.4, AL117336.22, AL354696.11, AC008655.6, AC002378.1, AC006111.3, AC005940.3, AF241728.1, AC007000.2, AL445489.10, AL033529.25, AL031282.1, AL021937.1, AL391833.10, AC006946.20, AC022212.4, AC090937.1, AC083866.2, AL356915.19, AL356805.5, Z85987.13, AL353748.13, AL163208.2, AL354815.10, AC017079.5, AL355476.12, AC005412.6, AL157817.13, AC069475.27, AC020908.6, AL049830.3, AL035072.16, AC005231.2, AC010271.6, AL122015.17, AL136137.15, AL121992.24, AC011475.6, Z84466.1, AL354864.16, AC018797.4, AC068533.7, AC006994.4, AL137792.11, Z98304.1, Z99943.1, AC011456.2, AL034372.33, AC003002.1, AP000088.1, AC010150.3, AF334404.1, AC016554.7,

					<p>AC010469.7, AL031229.2, AP000855.3, AC005924.2, AC004084.1, AC005920.1, AL158198.14, AC004991.1, AP001716.1, AC005874.3, AF134471.1, AK000008.1, AC009004.6, AF091512.1, AL096701.14, AL359091.10, AL050332.15, AC004998.2, AC009812.17, AC011471.6, AL031407.3, AC006121.1, AC011470.5, AC009488.5, AL355336.15, AC010582.6, Z73417.1, AL136300.22, AL136040.5, AP001725.1, AC005368.1, AC007690.11, AL109855.16, AL158815.14, AL049874.3, AC007371.16, AL078461.38, AC010913.9, AL132768.15, AL139054.1, AL355337.12, AL050335.32, AC040160.4, AL442167.1, AC004951.5, AC039057.8, AC008397.7, Z84487.2, AC005207.1, AC004881.1, AC005212.1, AC005872.2, AC010134.4, AC003080.1, AF279660.2, AC005207.1, AL356095.11, AC006254.10, AJ003147.1, AP000347.1, AB025285.1, AC008736.6, AL390878.6, AB011399.1, AC004000.1, AL136000.4, AC012476.8, AP001442.1, Z93015.9, AB001523.1, AC004999.1, AC020934.7, AL137060.13, AP001675.1, AL109935.39, Z98946.15, AC012318.7, AC004941.2, AC003684.1, AL354668.13, AL138720.19, AC007345.5, AC016995.4, AC011510.7, AL109827.8, AC004873.3, AC008267.6, AC005237.2, AL121928.13, AC007421.12, AL096840.25, Z99716.4, AC004971.3, AL049713.20, AL022163.1, AC020659.5, AC007666.12, AL354720.14, AL133342.14, AC011461.4, AC090948.1, AL132780.5, AP000141.1, AP001727.1, AC004686.1, AC010255.9, AC005746.1, AF053356.1, AC011469. 6.</p>
HSDJA15	501	795252	1 - 1429	15 - 1443	<p>AW864388, BF680896, BE220848, AI982565, BE967606, BE042914, AI215617, AA553540, AW864512, AL118801, Z45033, BF949835, Z40201, T87220, F09990, H11649, R38421, F07708, R55771, R45396, F04558, R41971, AI863613, T16890, AW051331, F03377, Z40771, AA188521, AI699582, F04949, H97413, AI784055, AW510885, AW136105, AW467042, AL046385, AI690813, AW080157, BF724894, AI364167, AI288328, AW265004, BE907663, AI559752, AL514511, AW972273, BF345598, AL514409, BF968666, BF868489, BF997967, AI689096, AW827289, AI925164, AI922597, BE876976, AI683270, AI342023, AI049669, AL513977, AL514359, AI950729, AW198090, AI598017, BE538997, BG105381, AI359787, AW194014, AI432532, AW087837, AI824357, AI860787, AL515413, N25033, AI581139, AI370623, AW972279, BG167830, BG033608, AI952306, AL513729, AV750565, AI421662, AI568061, AI580027, BE964206, AL513913, AI933574, AL514493, AI524179, AI610671, AI925281, AI917428, AI499963, BE780955, AI628214, AL514721, AI341690, AI224373, AI538008, AL514015, AL515171, AI887163, AI932794, BE729304, AI872154, AI267454, AI677646, AL514357, BF811802, AI635528, AV682250, AI638644, AW084896, AI890907, AL514791, AW105429, AW081648, AI538850, BG111199, AI583670, BE965732, AI345415, AW089844, BG029709, BF970652, AW020397, AW268221, AI446704, AW263796, AL514455, AW301974, AI049923, AI909641, AL513693, AI357902, AL513863, AV682403, AI651609, AI612107, AI499570, AI471325, AI522052, AI440238, AW020328, AL513865, BG114304, AL513713, AV682366, BF037097, AI289483, BF751299, AF255922.1, AL109779.1, AL161964.1, AK025113.1, AL136825.1, AK024992.1, AL133084.1, AF369701.1, AB062978.1, AK000476.1, AK026038.1, AF232009.1, AL050366.1, AF339775.1, BC007460.1, BC009398.1, AB060884.1, AB063074.1, AK000083.1, AL162002.1, BC005805.1, BC004899.1, AF155656.1, AF326206.1, AF265236.1,</p>

					BC004925.1, BC001967.1, AL359583.1, AC026307.16, BC009294.1, AL122110.1, AF002672.1, AK000653.1, AP001624.1, BC004292.1, AK027204.1, AL117460.1, AK025258.1, AK000718.1, AL389983.1, BC003591.1, AK025099.1, AB056421.1, BC001059.1, AK025092.1, AB047627.1, AL136805.1, AL133559.1, X68560.1, AP001746.1, AL133049.1, BC004349.1, BC005094.1, AL050149.1, U62966.1, AC002471.5, AC005374.5, BC008282.1, AK024747.1, AL133072.1, BC008591.1, AK026630.1, AL137533.1, AB060229.1, AC007980.1.2, BC009285.1, AF183393.1, AK025435.1, AL133608.1, BC005007.1, AL133088.1, BC007567.1, BC007420.1, X99971.1, S71381.1, AK027116.1, AF277181.1, BC004202.1, AL117435.1, Z35309.1, AK026633.1, AL117587.1, AL080154.1, BC005816.1, BC006458.1, BC002733.1, BC008649.1, BC001785.1, BC001964.1, AK026570.1, AL080150.1, AK025465.1, L10376.1, AL450164.7, AL137271.1, AK026885.1, BC004513.1, AL122100.1, AK027260.1, BC008387.1, AJ001838.1, BC007905.1, AL117626.1, AF143723.1, AF141289.1, AF103804.1, BC000100.1, AK024855.1, BC001305.1, BC002933.1, AL137548.1, AF090934.1, BC008364.1, AF217994.1, BC000090.1, S70057.1, AK024978.1, BC007796.1, M92439.1, BC003410.1, AK000418.1, BC006091.1, AL137560.1, BC008504.1, BC004951.1.
HSDJJ82	502	460602	1 - 448	15 - 462	AW594636, AA610164, AL050309.4, AC011445.6.
HSDJL42	503	103647 1	1 - 2527	15 - 2541	BG260294, BG260369, BE564562, AW138350, AA035736, AI377064, AA456520, R53655, R53544, AA053788, BF924748, T10268, AI124831, R34409, BE149848, R15018, T80356, AA232756, AI141245, R39046, AA232126, T10269, AI453516, R41458, R48947, AW964468, AV702035, AW975618, AA809122, AW966330, AV718692, AW973474, AW973465, AV724520, AI535686, AV720533, CI4331, AW973445, AW959799, AV718489, AW966333, Z21582, AW966386, AW960483, D51221, AW973307, AV720150, AV718427, AW949629, AW960465, AW960553, AW965158, AI557751, AV720731, AW966059, AV722801, AW973541, D58283, D80522, AW949645, AW966388, AV720729, Z30160, AW959570, AV721386, C14014, AW966531, AW978634, D80133, AV720151, AV699550, AW961136, D52291, AV720211, AW949634, AV719822, AV691387, AW973488, AW960454, AW966400, AV720616, AW966032, AW973330, AV700357, D80024, AA305578, AW949632, C05695, D80188, AW959202, D80248, AV718707, AV719557, AW966331, AW966398, AW959136, AV700889, AV696294, D57483, AW966062, AV719783, AV718931, AW960534, AV720464, H67854, AW966399, D80043, AW966343, AW952839, AW965177, AW966043, D59859, AW960532, AW964532, D80439, D58246, D81030, D80247, D51799, AW966369, D80251, AW973490, AV727418, D80157, AW975623, AA305409, AW966342, AV692290, AW950117, D80166, D80212, D80268, D80366, D59889, AW975613, D51423, D59619, AW978661, D80210, D80240, D80253, AV701839, D80219, AV719945, AV720088, AV719391, AW973447, AV719324, AV718938, D80064, AV718633, AW975605, AW966378, AW950578, AV720878, AW966368, AW959582, AV699447, AW966397, AW958993, AW949498, AV723927, AV699866, AV699715, AW965176, AW949653, AW949656, AV726330, AW949630, AW949631, AW949643, AW949618, AW949642, AW949657, AW949655, AV726423, D59551, AV684481,

						AV694084, AV689813, AW966029, D80022, D59627, AW966332, T11417, AW966054, F13647, C14389, AV655880, AW966380, AW949633, C16955, D45273, D59317, AW966053, AV720291, AV700229, AW966075, H67866, C15076, AW966065, AW960520, AK026158.1, AF131815.1, Z82022.1, AB028859.1, AB002449.1, AF058696. 1.
HSDJM31	504	491112	1 - 547	15 - 561		AA426010, AI986451, BE856226, AA773781, AI699994, BF477477, BF929123, BF526671, BF341281, AW020695, BF929118, BF966870, BF966816, BF966822, BF342126, AV726843, AC018616. 5.
HSDSB09	505	130149 8	1 - 795	15 - 809		BF432333, AI861851, AI240993, AI795956, AI074484, AI640759, AW006868, AW241621, BF592070, AW271387, AW614840, AW450466, AW243423, AI244694, AI640517, BF431431, BF431530, AI439169, AI613108, AI915938, AI984796, AI245393, AW300335, AA931466, AW235983, AC005722. 1.
HSDSE75	506	545057	1 - 1137	15 - 1151		AW378251, BF349814, AA687791, BF739001, AW378183, AA661723, H61383, T88677, H62404, AA443169, AW339864, AA458622, AA252063, AI129690, AW960791, AB006755.1, AB006756.1, AB006757. 1.
HSDZR57	507	651375	1 - 294	15 - 308		BE255995, AW473473, AW206723, BE312252, AI571368, AI810895, AI479711, AI656582, BE676619, AI492370, AI929750, AI762058, AW271956, BF591321, BF434884, AI500262, AW612319, AW085870, AI627969, AW168428, BE796769, AI767097, AI205848, AA632229, AI565786, BG033526, AV729047, AA876257, BE563237, BE905450, AA478285, BE257238, BE878838, BF664024, AA641693, AA478343, BC002907.1, AK000519.1, AC008755. 6.
HSHAX21	508	612823	1 - 1972	15 - 1986		BE379784, AL522216, AL520172, BF439334, AI652855, AI766309, BF512139, AI635715, AW299533, AW299897, AI129966, AW411210, AI624534, AI925109, AI803484, AI804159, BF184613, AA279212, AI609083, AI969459, AI860837, AA879465, AI183591, AW104990, AW316983, AW474646, AW630619, AI955714, AW409582, AA678827, BE139077, AA766602, AI431314, BF087963, AA081236, AW194027, BF701425, AI521521, AA588351, AI923638, AI155980, N39554, AV686756, AA769352, R78080, AW613876, AA259257, R22218, AA443811, AA969814, AA729654, R80114, T60532, AI969030, AW572611, AA259256, R80005, AW805183, BF592136, T51990, BE972627, Z38832, R23587, R24524, T52102, AA371263, AI564179, AI783565, BF700820, BE619819, AA447188, AK001845.1, AL136705. 1.
HSIAS17	509	135219 1	1 - 1767	15 - 1781		AL519037, AL522565, AL519036, AL529136, AL529135, AL530266, BE745103, BF528553, BF971144, BE745909, AW328641, BF796812, AL523650, AL525532, BE889377, BE514827, BF982724, BF036473, AW241827, BE378558, BE207101, BE675053, AI888192, AI990765, AW583031, AA469984, AA469998, AI660851, AW615511, AA412213, AW269957, BF589410, AA829396, BE673372, AW873087, BF589512, AW590539, AA834131, AW004730, AI204640, AA233023, AI339908, AW183546, AI434667, BE300850, AA884392, AW769309, AW138531, AA377194, AA555187, AL523649, AW138564, AA232705, AI698753, AA340084, AW584027, AI950847, R09010, BE151689, AI864316, AA523007, R05695, BE122646, BE122728, AL045891, AL041862, AL042898, AL079977, AL047092, AL047163, AL046356, AL043089, AL043321, AL043196, AW858522, BF726868, AL042745, AL042488, BE047737, AW772685, BF726504,

AL119748, AL514829, AL514869, BE047691, BE048071, BF727072, AL135012, AL514757, AW827276, BF726001, AL515043, BF970449, BE048013, AL513961, BF793324, AW663332, BE048179, AL047675, BF727212, BF726322, BF726234, BG249582, AL045327, BF726297, BE904178, BF727092, BF726894, AL038878, AW150511, BE963035, AL044276, BE018334, BF338002, AL040097, AL045500, AL515035, BF814447, AL040207, BF038131, AL042744, BG164371, AL047037, AL289310, AL042538, AW827175, AL045620, AL042515, BE047852, BF338723, BE897632, BE876033, BE885490, AL039276, AI609556, AW858243, BF680133, BG256592, BE880182, BE048319, BG036846, BF970768, AL514885, BE967104, BF822127, BE874133, AW673679, AL045163, BG252040, AI923509, AL514843, BG105240, BE875243, BG168185, AL514939, AL042628, AI494201, BE963560, BE048081, AL047611, AV729953, BE910373, AL514219, AL040243, BG110517, AL042365, AL049085, AI432644, AL515225, BG029667, BE047833, AI923989, BE622183, BF726451, AI433157, AI554821, BG252929, AW151136, AL514773, AI539771, BF814504, AI620284, BE785868, BF726207, AI364788, AI537677, AI670009, BG029829, AI500659, AI815232, AI801325, BF814409, AI500523, BF812438, BG109270, BE061378, BE965121, BE672647, AL121270, AI076319, AI874166, AI889147, AI582932, AI284517, AI500706, AI445237, AI491776, AW151138, AI889189, AI521560, AI500662, AI284509, AI538885, AI889168, AI866573, AI633493, AI434256, AI273179, AI805769, AI888661, AI284513, BE047738, AI888118, AW089226, AL045328, BE964820, AI440252, BF037971, AL134524, AK025899.1, AK025930.1, AF218014.1, AK024538.1, AL133049.1, AL122049.1, AL122101.1, BC008280.1, AK026480.1, AL133053.1, AL136763.1, AL359615.1, AF230496.1, AF090901.1, AK026784.1, AL117435.1, AB049892.1, BC008387.1, AF026816.2, AL137529.1, AK026434.1, AL162062.1, AB047615.1, AL122121.1, AK026627.1, AB048954.1, AL133016.1, AL110280.1, AK026534.1, AB047623.1, AL136844.1, AK026462.1, AK000083.1, AF183393.1, X65873.1, AB062750.1, BC007355.1, AL137560.1, AL137539.1, AB060827.1, AF069506.1, AL122111.1, BC002733.1, AB060214.1, AL136787.1, AK026542.1, AF348209.1, BC001098.1, AK026629.1, BC007021.1, X98834.1, AL137271.1, BC008417.1, AL137281.1, AL133072.1, AK026593.1, AL049347.1, AL122110.1, X82434.1, AL049466.1, AL133080.1, AF132676.1, BC005168.1, AL353957.1, AF061836.1, AL117460.1, AL050116.1, AL133077.1, AL512765.1, AL353956.1, BC007199.1, AF106862.1, AK024594.1, BC008488.1, AK026744.1, BC004556.1, AL050108.1, AL137521.1, AL137429.1, AF271350.1, S61953.1, AL137283.1, AK024588.1, AK000212.1, AF090943.1, AF218031.1, AL122050.1, BC009310.1, AL049452.1, AB063088.1, AK025254.1, BC003122.1, AL137556.1, AK026894.1, AL080159.1, AL390154.1, AL353940.1, AL512705.1, AB056421.1, AB056420.1, AK027164.1, AK025798.1, AL137550.1, AL359620.1, AL389982.1, AC068715.5, AF091084.1, AL049283.1, AL512684.1, BC006164.1, AB060863.1, Z82022.1, AB063093.1, AL133557.1, AF090903.1, AL050149.1, AL136882.1, AL136805.1, AL137479.1, BC007326.1, AK025967.1, BC001045.1, AB056809.1, BC003548.1, AF125948.1, BC007634.1, AL133606.1, X72889.1, BC005890.1, BC004958.1, AF090900.1, AK000486.1, AK026532.1, AB051158.1,					
---	--	--	--	--	--

					AL050277.1, AK000614.1, AL389939.1, AL359622.1, BC004529.1, AB055315.1, AL512733.1, AL133075.1, AL136768.1, AL117457.1, AL442082.1, AL136892.1, AL050138.1, AK026592.1, AC010374.5, BC001967.1, AB060912.1, AK026855.1, AL110225.1, BC002643.1, BC004265.1, AL512689.1, BC000714.1, AF111847.1, AF217991.1, AC023880.5, AL133560.1, BC003687.1, AF219137.1, AL512719.1, AF090934.1, AB060826.1, AK027096.1, AB048953.1, BC008899.1, AB050510.1, AK026647.1, AL133640.1, BC002798.1, AF225424.1, AK026541.1, AK026959.1, AK025414.1, AK026947.1, AK026526.1, AK027204.1, AK027213.1, AK025632.1, Y14314.1, AK026927.1, AF260566.1, BC005678.1, U80742.1, AL137480.1, U91329.1, AJ012755.1, AL133112.1, AF207829.1, AK027116.1, AL136799.1, AB055361.1, AF078844.1, BC001418.2, AK024524.1, AL136928.1, AK027081.1, AF097996.1, AL162008.1, AB048964.1, AL117583.1, AB063046.1, AB060908.1, AL137459.1, AK025431.1, AL117585.1, AK027200.1, AB055368.1, BC007680.1, AB052200.1, AK025524.1, AK025484.1, AL136845.1, AL359618.1, AL122093.1, AL133113.1, U42766.1, AL122123.1, AL080124.1, AL583915.1, AL512750.1, BC004244.1, AK000618.1, AB063070.1, AL110196.1, AK026353.1, AK000432.1, AK000137.1, AK025339.1, AC026464.6, BC004951.1, AL050172.1, AB060916.1, AL162006.1, AK027160.1, AB047904.1, AB049758.1, AK026631.1, AL137658.1, AY026527.1, BC006807.1.
HSICV24	510	135224 8	1 - 1396	15 - 1410	AW799303, AA633203, AW799302, AW799306, AI433789, BF223678, AI916373, AI672405, BE221531, AA643668, BF057669, AI433800, AI891024, AI891035, AI685189, BF223585, AW858463, AW858462, BE042564, AI286247, AW604739, AW604773, AA588275, AI183412, AA383471, AW858494, AA506115, T78713, BE719434, AI080125, T78329, AA910485, BE927209, R70701, AI675532, AW858492, AW361354, AI917244, BE005027, AW858469, AW805470, AA834710, BE009113, AA336466, AL137878.1, AL445217.3.
HSIDJ8I	511	589447	1 - 1289	15 - 1303	H27567, H27494, H71543, AI754653, BF857849, AW023111, AI521525, AW572721, AW963450, AI254770, AI926102, AV701462, AW020150, AI871973, AW500534, AW275432, AA218851, AA595661, BF854170, BF853574, BF853009, AW151247, AA536040, AW274078, AW958962, AI791659, AA669238, AI223626, AI249853, AW302048, BF725844, AI284543, BE139139, AW855625, AL042621, AW575000, AI801505, N68677, AI250552, AV758870, AW272294, H86725, AW851405, AI625604, AI251034, AA525807, AW075979, AI697235, AI090377, AA570255, AA702637, AV760014, AA729387, AA831426, AI697239, AI697242, AW504224, AI879951, AW502949, H77492, AW514065, AI224583, AV759203, BF527070, AA491767, AA229496, AL158830.17, AC005412.6, AL355855.23, AL132718.5, AL391868.15, AF285442.1, U91321.1, AP000505.1, AF129756.1, Y14768.1, AB000882.1, AL353804.22, AC005013.1, AC004448.2, AL139415.10, AC009309.4, AC091529.1, AL391122.9, AC009996.7, AL354836.13, AC010530.7, AC005274.1, AC007242.3, Z98048.1, AL354861.11, AC006121.1, AC007685.2, AC020552.4, AC008126.9, AC090509.1, AL096701.14, AC090951.1, AC066597.4, AC068319.4, AC006581.16, AC005332.1, AL117334.29, AC005200.1, AC024163.2, AC005632.2, AL031447.4, AL163279.2, AL355074.5, AL121586.31, AL021546.1, AJ295844.1, AC005484.2, AC013717.8, AL445196.7,

HSIDX71	512	103367 1	1 - 2104	15 - 2118	<p>AC007255.4, AC008760.6, AL136219.17, AL160274.9, AL031277.1, AL390037.16, AL031658.11, AC012170.6, AC005102.1, AC026464.6, AF228703.1, AC008068.4, AC005921.3, AL121808.4, AC004699.1, AC009412.6, AL031311.1, AC007216.2, AB053170.1, AL109965.34, AC009488.5, AF312915.1, AL132713.11, AL133173.19, AC087225.1, AC022516.4, AC009314.4, AC007376.9, AL034420.16, AC007850.29, AC005280.3, AL449305.4, AC020913.6, AC010326.6, AL391259.15, AL512885.4, AC004824.3, AC024168.4, AC009137.6, AL023575.1, AC010271.6, AC011446.6, AC004000.1, AC090005.1, AL121594.6, AL031726.22, AC005180.2, AL136305.14, AC006251.3, AL139316.5, AC007262.4, AL109963.4, AC012085.4, AP000503.1, AC005995.3, AC007041.3, AL121903.13, AL139039.17, AL121973.2, AL022326.1, AC073101.7, AL359986.15, AC006449.19, AL356257.14, AC019206.4, AL358237.13, AL138720.19, AC006457.3, AL162458.10, AL034380.26, AP002436.3, AL445143.2, AC010223.5, AL157952.8, AC007707.13, AL031293.1, AC008641.6, AL357315.14, AC003080.1, AL138688.27, AL138752.5, Z95115.1, AL158207.15, AC004840.3, Y10196.1, AC005859.1, AE006465.1, AL356115.9, AC018492.6, AC006455.2, AC018764.6, AL117348.25, AL049835.3, AL118520.26, AC004491.1, AC005480.3, AC090518.2, AC010618.7, AC005940.3, AF111168.2, AP000213.1, AC018636.4, AL356299.16, AC091493.1, AL136179.15, AC005257.1, AL096791.12, AL139113.21, AP000135.1, AL357518.15, AL021808.1, AL133453.3, Z93017.6, AL365444.11, AL390838.26, AL445669.9, AC008812.7, AL513008.14, AC007537.3, AC004447.1, AC003029.2, AC026776.4, Z97054.1, AC005399.19, AC010412.7, AL133466.22, AL136164.8, AC005527.3, AP000031.1, AC010616.5, AC074295.7, AC090532.1, AC004846.2, AC018808.4, AP001724.1, AC005529.7, AC004551.1, AL353777.18, AC004686.1, AC008044.4, AC018663.3, AC004873.3, AP001412.2, AL022316.2, AF064858.2, AC008279.3, Z94801.1, AC010363.6, AL162390.9, AC005070.1, AL078596.8, AL590762.1, AC079177.21, AC003101.1, AC004644.1, AC006101.3, AC005516.1, AL353798.9, AC002037.1, AL049576.19, AC008784.6, AC011455.6, AL162584.9, U82828.1, AF134726.1, AC009319.19, AC007541.9, AL136295.3, AC013449.8, AL132780.5, AL109952.15, AC005081.3, AC007991.7, AF168787.1, AL136304.10, AC004789.1, AL354808.24, AC027130.5, AP000152.1, AL138958.18, AC020633.3, AC004813.2, AC018500.3, AC006077.1, AL109956.19, AL139317.5, AC004851.2, AF243527. 1.</p> <p>AI921837, AV760391, AV760466, AV760389, AV733824, BE252421, BF725761, AV756220, AV759518, AV760019, BF868994, AV760560, AV762645, BG029528, AA760655, AW963474, AA594157, AL138431, AV698087, AI583252, AW851405, AW075768, AL042377, BE301584, BG164617, AL041924, BF342223, AA129746, AI732483, AA808153, AL037683, AI345695, BE882869, BE875478, AI917891, AV760508, AW855643, AL042853, AW975626, AW505253, BF828714, BF826830, AA169245, BE973547, AC007193.1, AL031985.10, AC006530.4, BC008387.1, AC008806.4, AC020558.4, AC009274.9, AC025594.5, AC004975.2, AL355392.7, AC009244.24, AC020906.6, AC008812.7, AC074121.16, AC002302.1, AL008635.1, AL353807.18, AF312915.1, AP001710.1, AC009131.6, AL354808.24, AP001694.1, AL031729.16, AP000208.1, AP000130.1, AL117694.5, U91323.1, AC020754.4, AC004686.1, AL138836.15, AL157838.24, AC004031.1,</p>
---------	-----	-------------	----------	-----------	---

					AC020916.7, AC006115.1, L30117.1, AC022206.3, AC007376.9, AL161747.5, AC002425.1, AL031003.1, AC009087.4, AL079342.17, AC010458.5, AF099810.1, AC008569.6, AC007225.2, L78810.1, AC002492.1, AL138724.12, AC005052.2, Z82214.23, AC005081.3, AC034251.5, AL049540.11, AC010473.5, AC003029.2, AC005224.1, AC004067.1, AC019046.4, AC004906.3, AL096701.14, AC024028.10, AL590763.1, AC009412.6, AP000514.1, AC010358.5, AC005754.1, AP001716.1, AL391259.15, AC002041.1, AP001623.1, AC015982.9, AC009408.3, AB014078.1, AF200465.1, AC007055.3, AC026464.6, Z98036.1, AF196779.1, AC005971.5, AL035071.17, AL049780.4, AL121658.2, AC010319.7, AP000873.4, AC007298.17, AC005799.1, AC005566.1, AL355343.18, AP003357.2, Z68284.1, AL022165.1, AC020644.6, Z85987.13, AC021396.6, AF279660.2, AL035703.20, Z85996.1, AC011742.3, AF243527.1, AL049776.3, AC002551.1, AL121895.26, AL049872.3, AC010742.4, AC012591.8, AC011464.5, AC007390.3, AL136126.34, AC018764.6, AC027319.5, Z93017.6, AL135839.15, AF024533.1, AL049637.43, AP001705.1, AC034242.5, AC004840.3, AC007617.10, AE006467.1, Z84487.2, AP000247.1, AL121585.22, AL391280.15, AC003043.1, AL138688.27, AL138743.5, AC008755.6, AJ003147.1, AC005902.7, AC011455.6, AC005519.3, AP001666.1, AL139286.13, AL355916.2, AC013726.7, AC006357.5, AL049699.8, AL021918.1, AL133477.16, AC009953.4, AC004832.3, AC002467.1, AF334404.1, Z86090.10, AP000424.3, AC005231.2, AL109807.16, AC006451.5, AC008745.6, AL354776.15, AC025262.27, AC007664.12, AP002898.1, AL020997.1, AL021397.1, AL137139.9, AC005037.2, AC004953.1, AC008687.4, AC034240.4, AC005015.2, AL023693.25, AK025772.1, AL160191.2, AL136295.3, AC008754.8, AL049829.4, AC010326.6, AL022320.23, AC005527.3, AL138878.10, AC015968.4, AL163218.2, AC022083.6, AL133387.8, AF196972.1, AC004967.3, AL449305.4, AC005736.1, AC005730.1, AC010956.12, AL132795.12, AC003603.35, AC011994.10, AC018641.3, AC020750.3, AP000783.4, AL133453.3, AL121926.24, AL109952.15, AL355353.23, AL033529.25, AC012384.16, U91321.1, AL139339.22, AC012507.9, AC016995.4, AC007041.3, AL353596.13, AC011452.6, AC005255.1, AC007868.2, AC009247.12, AL356983.33, AL135927.14, AC005409.1, AC007536. 9.
HSJBQ79	513	130467 7	1 - 573	15 - 587	BE875623, AL520513, BE889141, AW239200, BE874464, BE245256, AV723508, BF055054, AA232452, AA853047, BE885254, BE185284, BE620276, BF772972, BF772971, AW068453, AW176526, AL520512, BF772807, BF809972, AF183423. 1.
HSKCP69	514	702021	1 - 1237	15 - 1251	BE176391, AW043865, AW008387, AA707041, AA148822, AA682310, AI742170, AA029670, BF810978, BF439099, AA150422, AI168076, AA693926, N67047, W00859, AA044243, H75419, BG166474, BE467072, D62012, BF211202, BE771574, R09346, R09234, H68486, R06965, C00322, BG055641, AA044324, R06914, AL136693.1, AK027115.1, AC007969. 3.
HSKDA27	515	135240 9	1 - 4398	15 - 4412	BF338364, BG253437, BG122685, BF037455, AW303375, AW173315, BF037378, BG120262, BG117983, BF915045, BF057308, BG252401, BG034853, BF793365, BF793738, BF826037, AA570507, BF915582, BG122734, W07328, AA600736, AI971935, BE697573, BE313814, AI090486, AI751258, BE839359, BF447303, AW631492, AA625303, BF513067, AI609700, AI768270, AI751257,

					BE939504, AA417652, AI751036, BE378218, AI652363, AI971415, AA599207, AI371013, AA024968, AI147536, W55850, AA063585, AW794702, AA446024, BE889110, AI828437, AI862133, AA421744, AI272646, AI148235, AA419609, AW005418, AA634323, BF883408, BF378271, AA416767, AA258414, AW305114, AI083516, AI752526, AW024492, AI698032, AW957682, AI092202, AI191710, C05155, AA419525, AI218226, AI754332, AW794499, AA410929, AI936116, AI079893, BE272411, AA593295, AA455497, AI039656, BG035195, AA747741, AA774270, AA364833, AI350380, BF940413, T59268, BF197746, AI084698, AW800540, AA834031, AI673545, AW795817, AA978105, AA622501, AA032249, AA912802, AI432010, N66832, AI751035, AI754989, AI082183, BE178218, AI751086, N75819, N67061, AA971661, AA873147, AA478719, AA036654, T59227, AI538117, AA662437, BE765721, T66232, AI751085, AW674273, AA024662, BF197986, AI564218, AA319726, AA657729, N64555, AA852211, C03119, AI221431, AA455496, AA033678, C04206, AI520867, AA258397, AW867914, AW867908, AA382381, N24008, AA456579, AA936765, AI433202, AA446297, AW338252, BF940540, AI075349, D31528, BE839377, AI537292, AA382234, AI446798, BE839418, AA459088, BF724219, BE839363, BE773013, AI064722, AW375493, AW375513, AW375482, AW375483, AW375502, AW370152, AW134700, BF352435, AW375514, F12285, BE772982, AW797394, BE839409, BE710069, AA299257, AI061637, BE773049, AW375497, H63649, AW805832, H29954, AI587210, AW836298, BE773047, H75893, BF985423, BF089372, AA610296, T73259, D30912, BE839372, BE934501, AW937287, AL531501, AI270416, AW376140, AW838930, AI886158, AA375571, AL134647, H94943, BG006581, AW964941, AA336003, AA410897, R94988, W47433, R64321, D31541, W39467, AV693669, T82080, W04350, AA384793, AW572523, BE693478, AW375499, BF569459, AA428478, BF001215, H43934, AA382233, Z20767, AA382380, BE157468, W16893, BE066790, AW384231, BE157596, H80974, R96403, BE814079, AA345211, BG153436, AV654605, BE157507, AW292030, H62182, AW384236, AI382511, BF674009, AA335755, H25902, W65400, BG169442, AV710284, T64640, AA994712, BF944442, BF725435, BF726055, BF917617, W67868, H71581, AA326037, M14036.1, X07577.1, M13690.1, M13656.1, M13203.1, X54486.1, X07432.1, AB062098.1, X07431.1, AB062097.1, AB062096. 1.
HSKHZ81	516	130710	1 - 955	15 - 969	AI814274, BF869496, AI092236, AI275399, AI970748, AW381532, BF828729, BF828779, AI355259, AA055367, AA582963, BF825322, BE158757, BE158812, BE182090, BE182079, BE140770, BF737235, BE182110, BF836665, AW238620, BF828691, BF828827, AA055699, BE711192, BE717546, BF737527, BE140771, BF094219, BE158774, BF826017, BF838537, BE939669, AC002389. 1.
HSKNB56	517	548077	1 - 1320	15 - 1334	AV715380, AV705910, BG170454, AW300598, AW996981, AA669095, AA278335, AI797687, AI948608, AA464762, AW996774, BF036901, AI718165, AI129358, AA504439, AI765613, AA114888, BE702298, AA521311, AA114887, AW298550, AA504203, AA810071, AI051218, AI299255, AA804200, AI701050, AI694270, AI631949, AA974370, BF434357, AI890342, AA256836, AI129632, AI023212, BE709212, AI935316, BE702132, AV726168, BE702036, AA252310, AA831496, AA662808, BE169470, AA464174, D57415, AA705444, BE702013, AA280044, Z44155, AC002389. 1.

						AW902156, BE702163, T71333, Z25261, BE702070, D54675, AA163321, W46279, AI420451, N69756, BE702230, T71487, AA832206, AA973497, AA521314, BF109037, AA877638, AW196653, AI027401, AA255623, AA863081, AI807828, AI831132, AA995204, AA252340, Z28882, W46278, Z40146, BG249572, D57019, BE549886, N87679, T84473, AA452985, Z19443, AI918466, AV651701, F00129, AV651262, BE841213, D56990, AI351209, BE813969, AW369458, AA743770, AL047888, AL047889, AW997000, BF840712, AW582764, AW963201, AW339489, AC002350. 1.
HSLCQ82	518	135222 6	1 - 1462	15 - 1476		BF116042, AA454571, AW192766, AI278160, H24834, AI091291, AA456465, AI242593, AA098966, AI379014, H24785, AA921986, BF745395.
HSLJG37	519	101692 0	1 - 2112	15 - 2126		AI733659, AI792379, AI003110, BF931916.
HSODE04	520	906081	1 - 1356	15 - 1370		BF369719, Z99289.1, AK027151. 1.
HSPBF70	521	793744	1 - 1383	15 - 1397		BF338332, BG178189, BE298379, AW772433, AI640184, AI751243, AI206927, AI989675, BF816124, AI439989, AI136304, AI128437, AI640906, AI136410, AA129952, AA341541, BE046990, AW382204, AW614497, BE004682, AI804666, BF327533, AI751242, BF327534, AW382118, AW992082, BE004684, AI689235, AI675842, AI274910, AI678921, AW082362, T10108, AI014513, AI538135, N47608, AI141309, AA885897, AI797519, AA652696, AI193489, AA872954, AI201747, AI244946, AI685761, AI810996, BF222389, N89795, AI224610, AI309547, AA513392, AA877674, AA894705, AA905637, AI056500, AW188156, AI138677, AI432328, AW466885, AI420740, AW873600, AI459017, AL047844, AI762549, AI382011, BF980675, T03552, T30150, AA917939, AI005050, AI797790, AI927908, BE857274, AA156935, AI453114, AL047845, H20185, AI140769, BF347892, F20400, AA628898, BE888983, AA928421, H05737, AW189222, AI860596, AA642494, AW058508, T70036, C00014, AA357087, AA731862, BF528632, AA742201, AA993626, AW873561, R39978, AI423668, H16241, AA983866, AI952326, BE152468, AL135012, AW858522, BF084778, AL134110, AW577199, AW601637, AL134524, AW577201, AL045327, AL045494, AL042523, BE927373, AW577192, AL045328, AL047163, AL042420, AL042468, U46344, AL042519, AE006467.1, AL031709.12, AK024842.1, AL136764.1, AL136762.1, AL133053.1, AL122101.1, AL136763.1, AL136758. 1.
HSQE084	522	130670 2	1 - 917	15 - 931		BE874396, BF210667, AV700682, AI271550, AI753504, AW082138, AV745382, AA809220, AW081079, AI879695, AV746084, AV753894, BF576504, AI879318, AI264068, AI219556, AV746036, AW973033, AA455733, AI382746, AA431230, AA548778, AV696126, BE673279, AW386283, AW608255, W78099, AA432251, AW608247, AI344174, AI344234, AF100751.1, AC009948.3, AL109755.14, Z62799.1, Z64678. 1.
HSSAJ29	523	630636	1 - 1030	15 - 1044		AU118451, AL040060, AI222417, AW274713, AI799566, AI927599, AW316768, AI432204, BF507740, AU145007, AW275309, AI221808, AI251922, T77427, AI701846, T31064, AA970391, N69324, BG056871, AA325268, AW964700, AA377871, Z44814, R39528, AA757992, AA969668, AI282347, BF340244, R01659, C01260, Z40602, BG251489, AA371729, AA371555, H39944, AA078017, AF035281.1, AC004890. 2.

HSSDX51	524	566879	1 - 1129	15 - 1143	BF727258, AI792073, AI791928, BF088585, BE503986, BF736863, BF930592, BF527664, BE503764, BF727075, AW206230, BF849175, AA317765, R60584, AU123336, H22857, AI694498, F03192, R05669, AA365484, AW953971, AJ276171.1, AJ279016.1, AK001182. 1.
HSSFT08	525	589978	1 - 777	15 - 791	AA602964, AA609200, AL133255.13, AL157879.7, AL009030. 15.
HSSGD52	526	135234 3	1 - 2411	15 - 2425	AU140435, AI609706, AU118420, AI831837, BF529529, AI554814, BE786730, BF984481, BE872435, BE899402, BG179330, AI479884, AI982533, AI690830, AI346254, AI828401, BF094552, BE881525, BF094556, BE66959, BG037013, AW471268, AI561157, AI638805, AL037237, BE855637, AW296244, AI566243, AW675774, AI401405, AW673452, AI476445, AW001226, BF679313, BG057709, AA127685, BE907977, AA861929, BG260609, BF237821, AW956800, AA447921, AI571901, AW589479, AI766919, AI473830, AA938585, AU144989, AI262410, AA559052, AI446187, BG008928, AA917796, BE503565, AI275823, AW470299, AA127785, AI861789, AI167155, AW008965, AA905576, AI167659, BE218804, AI493520, AI281278, H99336, BE710637, AW205944, AI752329, AI752330, AI765810, AV653987, W52643, BF946032, AW168159, BF945858, BF316720, N26442, AA972078, AI817934, AI264423, W45166, AI557365, AI264431, AI288175, BE549758, AA442622, AI824617, AA919004, R70430, AA857204, AI368414, BF593079, AI418025, BE898318, AI262064, AA678751, BG057197, AI084548, W44908, H42841, AI827422, BE771829, AW449397, R48178, N93753, H72494, AA339568, BF108797, BE771822, R44778, BE091331, N88020, R48179, BE003856, AA678750, BE717116, AA837786, AW452952, BE828508, BF663442, AA975074, R19112, D11951, AI391505, BE814402, AI424232, AA36865, BF765542, AI420371, R82965, AW511561, AA541734, BE774069, AI867545, AA367966, AA385530, AA732924, AI371313, BF740054, AI828905, BF957657, H53943, BF764296, BF742191, T10746, F31373, AI559802, R09272, BG116091, R69447, AA303616, BE301258, W78796, W52012, BF956541, T07614, AW439006, T75428, BF917390, BE179163, AI086470, BF821360, BE938534, AA577454, BE301248, AI869470, AU076647, BF001674, AI086839, W94113, U94831.1, AL136295. 3.
HSSGG82	527	618535	1 - 1529	15 - 1543	AW964177, BF663662, AW603820, AI884560, AA398834, AA054137, BE503763, AW613529, BF509801, AA378851, H86275, H84069, BF346487, BF754228, AA327575, AA421165, BF686426, AI825151, BF476556, AI700323, AI591094, AW206900, AI948671, AI695979, AI632290, AW204774, AW134977.
HSSJC35	528	130693 7	1 - 1160	15 - 1174	BE867020, AI478611, AW135035, AI796551, AI493335, AI763397, AI205153, AW452868, AW024931, AI770003, AI860167, AW300835, AW236836, AI039293, AA312699, AI033837, BE047902, BF196530, AI587364, AI700805, AI364782, AI631435, AW516669, AA461101, AA741034, AA310989, AA449433, AI671731, AI373338, BE464413, AI621029, AI989810, AI247252, AI478533, AA448924, BF092110, AK000413.1, AB058750.1, AL121845. 20.
HSTBJ86	529	753250	1 - 1752	15 - 1766	AA380166, AC008553.4, AP001572.3, AL354811.13, AP000802.4, AC010591.8, AL161897.6, AC012323.7, AC005883.14, AL359874. 9.
HSUBW09	530	413246	1 - 1007	15 - 1021	AI991103, AI765351, AA703513, BF939824, AI925701, AW295389, AW976578, AI199421, AI422698, AI934983, BE501421, AI127932, AA703493, AW297092, AA677025, AA848037,

						AA814098, AW404152, AW904298, AW182186, AW197850, AA741121, AA651794, AI678148, AA906044, F18680, AA743764, AI632270, AW590435, BE045258, AA608892.
HSVAM10	531	520328	1 - 419	15 - 433		AI654853.
HSVAT68	532	637680	1 - 1141	15 - 1155		BF513864, AI309114, AC008583. 5.
HSVBU91	533	596868	1 - 713	15 - 727		AW839808, AA077633, BF919965, AC008171.3, AF041056.1, AC004089.25, AC005081.3, AC005015.2, AB006629. 2.
HSXCG83	534	944388	1 - 2098	15 - 2112		BF541621, AI926957, AI741909, AA534993, AI435345, AI803123, D82268, N34976, AW167331, AI093828, BF037342, AI140410, AA588188, BF349607, AI287515, AA844074, AA706579, AA759372, AI198783, H78775, AI261392, AI480026, AI027233, AA255439, BF800502, AA256930, AI928179, AW192517, AW961173, AA307508, BE143874, BE765577, BE766269, R11616, AI399819, BF752821, AW853138, AW352290, BF752819, BF752822, AW352288, AW352272, BF349404, AW352292, BF752834, AW352275, BE869822, AL119319, Z99396, AW979284, AW970958, AW971965, AW975987, AL037094, AW979004, AW973808, AL036858, AW970564, AW969751, AW979210, AW972857, AW970978, AL036924, AW979140, AW972226, AW979252, AW976039, AW971981, BF868687, AW975126, AW973830, AW975247, AW969658, AW972933, AW972637, AW975922, AW971409, AW973715, AW971112, AW973821, AW972593, AW974272, AW979250, AW975952, AW971245, AW979238, AW976023, AW975607, AW975635, AW970043, AW969656, AL037639, AW973217, AW969885, AW973270, AW979204, AW970113, AW972884, AW973202, AW972695, AW973805, AW973213, AW972719, AW976515, AW975976, AW979165, AW971387, AW976510, AW971954, AW973770, AW972680, AW975975, AW969884, AW972943, AW969759, AW979083, BF592735, AW976982, AW970587, AW975876, AW973650, AW979175, AW973986, AW979064, AW975938, AW975016, AW975138, AW975966, AW975968, AW970921, AW969766, AW979116, AW972806, AW973987, AW975910, AW975943, AW972689, AW972706, AW973164, AW970097, AW973824, AW971964, BF588769, AW975904, AW974379, AW969752, AW976037, AW973718, AW973967, AW975933, AW979169, AW973207, AW979176, AW972882, AW973104, AW975028, AW969782, AW970868, AW972868, AW973985, AW973210, AW975648, AW971129, AW971403, AW973209, AW975971, AW972864, AW973219, AW972440, AW979178, AW972883, AW979081, AW973167, AW975162, AW973750, AW973185, AW971183, AW970110, AW972705, AW972827, AW973946, AW976012, AW979147, AW972823, AW970589, AW971259, AW971350, AW975261, AW971367, AW972685, AW972690, AW972817, AW979294, AW972371, AW975229, AW971968, AW972880, AW979085, AW979228, AW972699, AW979220, AW973190, AW974915, AW973088, AW975173, AW975955, AW974107, AW971429, AW969861, AW979219, AL036418, AW972808, AW973728, AW969839, AW972866, AW972417, AW973271, AW975018, AW975928, AW979201, AW972837, AW975964, AW972816, AW979090, AW969753, AW973997, AW975106, AW975168, AW974089, AW975025, AW971415, AW972711, AW972889, AW973804, AW971414, AW971413, AW975031, AW975914, AW972710, AW973740, AK024632.1, AB026436. I.

HSXE06	535	101692 4	1 - 1584	15 - 1598	BG171665, BG109746, BE005933, BG026351, AI670834, AI793031, AW996511, AA481590, BF791148, BF110900, AA884278, AI554009, AA418164, AW966701, AI287582, N39228, AA177106, AA773834, AA233042, AI366763, AA417913, BF327654, AA232936, AW085026, N35014, R46292, F12643, BF947218, AA953139, AV732449, AV660624, Z43417, R54534, AI249382, AI817549, H53484, T34371, T32748, BE762828, AI268132, H26220, F08007, AA976991, Z39490, N72112, F03527, F04961, AA357869, H99278, F10258, R81334, R37424, AV734143, F07252, T74533, AA976568, R54437, AI433026, AW611733, N46671, H13274, N46079, AA481525, D62268, AA360677, H08120, R66918, R76039, BF830437, AA296802, BE811300, W00375, N43768, H93364, N46077, BE718145, AI559424, N72148, AA029181, AA743316, H08119, F36454, AA361446, AW890129, BE831170, AW063750, T77292, W00419, AI135691, AA057340, H86888, AA044960, H38947, BF891014, BE718142, D20601, AW293865, AF007142.1, AC024581.3, AL356017.3.
HSXGI47	536	886200	1 - 1242	15 - 1256	AV760760, AW968156, AA737309, BE888245, AA640430, AA167792, AL163279.2, AC019205.4, AC027319.5, AC011811.42, AL449363.12, AC011445.6, AC020916.7, AC003663.1, AL162615.13, AL121886.22, AC005412.6, AL096840.25, AC007404.4, AL035704.9, AP001717.1, AC005098.2, AL356915.19, AC003029.2, AE000658.1, AC007739.2, AC010359.5, AC004867.5, AL022476.2, AC083884.6, AC005512.1, AC009079.4, AC004965.2, AC005932.1, AL031670.6, AC022217.5, AP002852.3, AC010605.4, AP001725.1, AC011489.6, AC008736.6, AC005519.3, AC009123.6, AL590762.1, AC004983.2, AL049776.3, AL138756.23, AC004166.12, AC008744.6, AC008474.7, AC005011.2, AC008812.7, AC011005.7, AL034420.16, AL137792.11, AC074121.16, AC016643.6, AL355392.7, AL121594.6, AC005089.2, AC020913.6, AL022721.1, AL449305.4, AL109827.8, AC006023.2, AC018720.5, AL035685.21, AL021155.1, AC010102.3, AC007731.14, AC079468.3, AL008730.1, AP001724.1, AC005666.1, AL391803.14, AC005736.1, AC020908.6, U91323.1, AL121845.20, AC005000.2, AC008745.6, AC008537.5, AL031005.1, AC026464.6, AL031727.42, AC011446.6, AC027644.9, AC008555.5, AC004821.3, AL031311.1, AF001548.1, AC009220.10, AC005280.3, AC016637.6, AP001716.1, AC011491.5, AC004491.1, AL022328.21, AC0090947.1, AL135749.3, AC006141.2, AL354760.11, AL035659.22, AC027126.4, AC005102.1, AC020663.1, AL022323.7, AL050318.13, AL022322.1, AC008379.6, AC009155.3, AC011485.6, AC016644.7, AC008895.7, AC000353.27, AC005484.2, AC005274.1, AF053356.1, AL135927.14, AC007227.3, AC005500.2, AC008521.5, AC009144.5, AC007318.4, AC005288.1, AL161670.4, AC011461.4, AL133367.4, AC010320.9, AL022315.1, AC005800.1, AC002418.1, AC006101.3, AL391259.15, Z93023.1, AC006014.2, AC002350.1, AC009570.13, AD000092.1, AC007003.4, AC009131.6, AC018828.3, AC004929.2, AL138724.12, AL079342.17, Z99716.4, AC002425.1, AL121992.24, AL096791.12, AL049874.3, AL049759.10, AC005527.3, AC004883.2, AC018711.4, AL118520.26, AL121653.2, AC025593.5, AC006452.4, AL050335.32, AL139317.5, AC0117348.25, AC006441.13, AL390252.9, AC019206.4, AC007151.2, AC010530.7, Y14768.1, AP000113.1, AP001709.1, Z93015.9, AC000003.1, Z84466.1, AC006329.5, AC004841.2, AC002312.1, AC018638.5, AC006345.4, AC002565.1, Z83844.5, AL451075.15, AC007374.6, AC005821.1, AL356481.16, AC004967.3,

						AC005071.2, AC009412.6, AL139113.21, AC011247.10, AP000505.1, AL121819.6, AL033529.25, AC008738.6, AC003070.1, AC018809.4, Z93017.6, AF317635.1, AF196779.1, AC074013.5, AF129756.1, AC009120.8, AC008547.5, AC009086.5, AL034429.1, AL158830.17, AL353777.18, AC008481.7, AP003439.2, AP001748.1, Z95116.1, AC005057.2, AE006639.1, AC009309.4, AL355312.24, AC004951.5, AC009137.6, AL020997.1, AL049569.13, AL158206.8, AC026765.22, AL133174.15, AL445686.14, AP002348.3, AL160165.17, AC016526.6, AC068533. 7.
HSYAV50	537	847358	1 - 2787	15 - 2801		BF313680, BE742185, BE383304, BE741869, BF526599, BE619099, AI341487, AI971709, AI623222, AW593800, AW959076, AI983635, AI952164, AW275114, AI800442, AA977038, AW513859, AW273202, AW337946, AW273147, AI801910, BE463718, AA250733, AW072844, AI453134, AI818468, AI086791, BF329916, AW166266, AW300481, AI561259, AW103087, BE048584, BE907359, AW470887, BF063936, AI207341, AW235230, AA448721, AW206033, AW175624, AW193322, AW193240, AI128968, AW264492, AA410939, AI682412, AA455784, BF525380, AI631778, AW771868, AI669677, BE619620, AI128695, AA448630, AA456607, AW239315, AW195959, AI825128, AA327876, AI168173, BF376618, N79049, AA349394, AI470892, BF194812, D79030, AA902669, AI569983, AI682120, AA385255, AI052433, AI948815, W24199, AI735600, W24193, AI214684, AA770139, AI672486, AA769789, N91773, BF944570, C02034, AI955870, AC005222. 1.
HSYAV66	538	686437	1 - 1393	15 - 1407		BF036117, AF126372. 1.
HSYAZ50	539	102767 3	1 - 1083	15 - 1097		BF918029, BF918027, BF732372, AW028622, HS8607, BF935019, AW471489, AV707971, AV709796, AF168681.1, AC007378. 4.
HSYAZ63	540	117753 7	1 - 3452	15 - 3466		AV722966, BE388876, AV760983, AV762946, BF185935, AV762161, BF108823, AV759946, AV761323, BF064074, BF689470, BF001385, AI970338, AL046433, AI348109, BE349503, AI819289, AI090048, AW305162, AI857825, AA551911, AI963412, BF690404, N90883, AI652494, BG055077, AA311166, BE502539, AI200346, AA158746, AA502649, AW083258, BE551410, AV763075, W04340, AA150467, F29360, BF436259, AA040295, F21409, BF344822, R86673, AW206720, AI961780, W79500, AI831018, AA514281, AA609867, T67539, W79599, F25102, AA807108, AI351521, F36686, BE164504, AA056972, BF917215, F24355, W16820, AA513661, F30483, AI349360, AI805040, AA532766, AW590360, AI962009, AI817647, BE140360, AI720757, BG236085, T64334, AI400242, AI832241, R86847, BF741663, AI383420, N74174, T65686, N92928, AA584402, AW138172, AA297326, BE170117, AA359080, AL515041, AL515035, AL513867, AL515375, AL040243, AL513907, AL514303, AI540832, BE905408, AI433976, BG179993, BF883916, BG260037, AV681987, AW274192, BG257535, BG036520, BF793644, AL135661, BE048026, BF525438, AV657079, AI475371, BF037097, BG031815, BE964812, BG108147, AV715263, AL121270, AI702406, AI687728, AI863014, AL513911, AI439087, BE887488, BF340104, AV755678, BF812933, AL046849, BE048071, AV655645, AW071417, AI440239, BG036846, AL514627, BE876033, BG032208, AI224992, AI250293, AI497733, BE904178, BE877769, AL513553, BE047952, AI433157, BF968041, AL513597, AI064830, BE018334, AV757705, AV705644, AI802542, BE881061,

					AK026534.1, AK026480.1, AK024538.1, AL117435.1, AF225424.1, AL353745.7, AC026464.6, AB055366.1, AL117585.1, AB052191.1, AL117583.1, AB047904.1, BC002839.1, AL133560.1, AK026504.1, AK026959.1, AF177336.1, AP001346.1, AL512765.1, AC084881.19, AK026532.1, AK027113.1, AK000432.1, S61953.1, BC008983.1, AL136928.1, AB052200.1, AC009364.8, AL049464.1, AL158191.17, AL049300.1, AK000323.1, AK026353.1, AK026927.1, AC018643.3, AL050024.1, AL512883.5, AB056421.1, AK025414.1, AL512689.1, AP001666.1, AL512684.1, AB048974.1, BC007199.1, AL122110.1, BC008899.1, AL136845.1, AK025391.1, BC008070.1, AK026086.1, AK025967.1, AL353594.13, Z82022.1, BC004951.1, AK026528.1, AB049892.1, AK027204.1, AL353625.5, AK000718.1, AL355795.13, AL359583.1, AK027164.1, AL122098.1, AI889193.
HSYBG37	541	105631 7	1 - 1224	15 - 1238	BE898532, BF034673, BF337228, BF528632, BE857436, BE732588, BF527968, BE888983, BG033426, AW372231, AA156935, BF915018, AV690944, AI140769, AW068552, AI818102, AI870885, AA135715, AA928421, AL047844, AI927908, AI762549, AL047845, AI797790, AI005050, AA917939, AW873600, AI453114, AI420740, AW466885, AI432328, AI138677, AW188156, AW873561, BF980675, AW058508, BF770293, AA628898, AI094804, AI056500, BF820729, AI375863, BE857274, AW959629, AA905637, AI382011, AI860596, AA877674, AA513392, AI459017, W73121, AI242677, AI309547, BF819613, HI6241, T70036, AA642494, AI675842, T03552, AI689235, BF919604, AI274910, AV748307, C00014, AI678921, AA993626, AI201747, AA742201, BF351125, BF770277, AW082362, BF914643, T30150, AI014513, R93245, H83130, AI538135, AI244946, AI952326, N45499, BF344569, AI685761, H05737, F20400, BF914807, AI094715, AI810996, AA320821, BF222389, H20376, H20185, H83129, T10108, AA370998, H12111, T70103, BF919644, AI800313, R47434, AI557606, AA299558, BF983106, BF347892, N47608, BF590090, AI141309, BF915129, AW385116, AA885897, BF917925, BF917920, N89795, AI797519, AA652696, AI193489, AA894705, T10109, AW189222, BF350004, BE829911, AI224610, AI423668, AA872954, AI207820, R39978, AI989675, AI439989, AI640906, BE046990, AI206927, AA136304, AW614497, AI751243, AA128437, AW772433, AI640184, AW385115, BF326281, W39052, AA595730, BF088390, AA731862, BF338332, BF111399, BF770143, BE767158, AA983866, AF302786.1, AE006467.1, AL031709.12, AK024842. 1.
HSZAF47	542	135217 2	1 - 1290	15 - 1304	AW298370, AI433823, AI239867, D62170, D61860, AF329839.1, AC007016. 5.
HT3SF53	543	884170	1 - 1912	15 - 1926	U69197, BE889880, AV707406, BG256172, BE379687, BE380123, BF691542, AV695897, BG259259, BF183831, BF984932, BE348298, BE813737, BF671812, BE837505, AL528978, BE966164, BF447947, BF540997, AA889669, AI983007, AA191622, BF131956, AI819766, AA427366, AI802592, BF217999, BG260695, BE042598, BF218184, AV700494, N31181, H16250, H11397, BF572925, AW952360, AA846829, AW874257, AI190464, AA157806, AI925182, BF952221, AI472734, BE888420, AA903609, AW169049, AW015713, AA033780, AA034036, AA609322, AI424168, BF219352, BE328721, AI333376, AW882963, AI362641, AW197207, AA910279, AI557117,

					<p>AI308825, AA847184, N71642, AI433939, AW263961, N45294, W01668, BE856264, AA907298, T15527, T89105, AA658226, AW576192, BF195028, AA594141, AW183696, N22707, AA931425, W03486, AW105669, AI419995, AI740524, AW194431, AI340359, BF944106, BG030457, AI135266, AA160287, AI017580, AA361043, BG179629, AW166420, AA903241, AL044093, AA364671, AA858303, AW069464, AL044094, AA610333, AI216722, BF983099, AI803720, BF084671, T35050, AI864144, BF221793, BE170395, T30766, AI921819, BF361447, AA160286, AI190687, AA074277, N51259, R33551, F10050, Z45902, AA135312, H16449, BF882016, AA427905, N54743, AI814813, W28253, AA541311, H96787, BE765518, BE770902, BE810330, AA904093, AA747271, AW877284, AW581619, AA207148, AW090441, AA669068, AI963361, AI268881, AI061243, AI150891, T94142, AA135198, AA206434, BF594187, AA593048, BF931525, AA319228, AW366804, AA135111, Z41528, AA135106, AW272442, AW972911, AI262450, T10553, AA043331, D20243, AA090084, T11277, AI138341, AV705048, AA343747, T31173, N67513, N66837, AI383429, AW877286, R00189, AI868926, BE766096, BE766172, BE674157, BF084152, AA216135, AI097209, AA578579, AA886271, T31172, AA043332, BF802755, BF808023, T39112, BE962266, T06248, AW384062, BF964474, AI160470, BF361446, T94064, AI970644, AI687569, AW021379, BE089866, T74327, BE149777, AI799396, AA620459, AW069630, AA741223, R23931, AA704085, AA588415, AA613110, AI917566, BE439382, BF932443, AI277023, BF837456, H17179, BF238717, AI873497, BE834188, AI445175, AW886754, AA218774, BF953692, AK025519.1, AF061938.1, AF061939.1, AF061940.1, AF061941.1, AI132258.1, AI136601.1, AI133174.15, BC000830.1.</p>
HT5GJ57	544	129992 I	1 - 1759	15 - 1773	<p>BF975647, AW574516, BG259057, BE397179, BE396519, AW575080, BF795582, BF663664, AI521311, AW237047, AI446257, AI862389, BE559713, BF128855, BF573063, BF238156, AW296989, AU157608, AA811488, AA827120, AW338778, AI439638, AI250231, AI312540, AA633095, AV742373, AI343438, BE513368, AA604586, AI669176, AI149413, AW732709, AA723128, AW403042, BE269253, BE560794, AA722908, W57991, AI826124, BE246032, BG120258, AU138425, BE513265, AI865336, AI219708, AI589599, H23560, AA765412, AI589912, T61448, BE247378, BE560732, AW444827, AA594614, AA361096, AA648496, N34423, AV743440, W58075, N48728, AV742389, AA975334, AA731435, AA166766, AA810638, AW298682, AI919140, AI341517, BE245894, AI962720, BF062274, T30849, AW402333, AI982795, T25945, AA810222, AA807717, Z39117, AV756294, N48658, AW405561, AV724221, BG120887, AA593214, AW083122, AA639378, AI492348, H23535, AI656821, AF252613.1, BC009204.1, BC001609.1, AF252611.1, AF252614.1, AK002099.1, AF257135.1, AF252612.1, AF045555.1, BC006080.1, AC005081.3, AF086239.1.</p>
HTADW91	545	844835	1 - 1467	15 - 1481	<p>AL524277, AL525820, BE382621, BE906048, BE313348, BF311240, BF125870, BE314074, BE262971, BE261842, AW957565, AA434527, AI679032, AA429042, BF530443, AI269591, BF568093, AI751352, BF087452, AI926385, AW957563, AA427824, BF829853, BF207056, AI307680, AW751395, R73343, AA358983, AA985603, BF206540, BG029042, AA378137, AW016282, AA904900, BE767196, BE049123, AI538331, AI498177, AW084403, AW085619, AA428054,</p>

					AW081391, AA461497, AW439261, AI081131, AI764997, BE672411, AW057677, AA761398, BE221467, AW080458, AI244183, AI634014, AW193005, AW339212, AW516122, AW027659, AW067803, AI954056, AW571944, AI633339, AA772395, AI916888, AI683203, AI422341, AW025425, BE671235, AI147736, AI090554, AI380245, AW439080, AI282915, BF196022, AA351024, AI565421, AI089315, BE501181, BF476178, AI205166, AW270733, AI751353, AA135896, AI936764, AW024598, AI767080, AI016528, AA135895, AV707105, AA620766, R10091, T49864, BF920348, T97167, AI831497, AA399634, AA152389, AA865196, AI2777342, R50357, AW081268, BE503733, R11029, AA617807, R11077, AA649308, R10190, BF589988, R53497, N50819, R77618, AA568975, AA399595, AL525780, R72870, W68569, AA351025, R71797, AA912795, R79394, AW768731, BF903645, AA894462, H13235, H24510, BE811970, BF568932, H30448, AA627105, BF206286, BF340605, AW067872, BC008853.1, AL133581. 1.
HTADX17	546	753289	1 - 1133	15 - 1147	AA446344, AA612751, AA298785, AA298780, AA298784, AA446524, AA298781, AA381170.
HTAEE28	547	101829 1	1 - 1327	15 - 1341	AW195720, AI765273, AI817356, AI928166, AI283845, BE503396, AW081502, BE349083, BF059350, AA419437, AA758800, AW206944, AA933673, AW104261, AI627565, AI264565, AW469909, AA845240, AA332515, AL021453. 1.
HTDAF28	548	396835	1 - 898	15 - 912	AI760170, AI150687, BF829200, AU158613, BF809865, AW273858, BE312404, BF316832, AU148518, BF314749, AU149720, BF315081, AI400198, AW062695, AI924082, BF314377, AW087415, BE047624, AI689214, AI684707, AA526748, BF315285, BE262228, AI566857, AI377786, AW167628, R65808, AA525309, R32753, AW663929, AI242434, BF206474, AI927229, R32754, AI956002, AI927230, AI701965, AU156607, BF349416, AW292033, AI368435, AA897436, BE314877, AI221593, AI612972, AI364630, BE185584, BF354201, AF352728.1, AF352729.1, AK022603. 1.
HTAEAF65	549	866485	1 - 549	15 - 563	AA778552, AI201364, AI150012, AA876180, AI223025, AW663435, AW304049, AW663514, AA978197, AI223459, AA903410, AA382504, AA864517, AI352610, AF012359, AA868778, AW102794, AW058243, AL513723, AI921248, AL513907, AL514015, F36855, BF792781, AI978703, AI538885, AI811603, AW131994, AL514721, AV736808, AA190341, AL118781, AI863466, AI250852, BE966927, AW827206, AI890907, AI049669, AL514867, AI538850, AI677797, AL039783, AI345688, BE011880, AI241744, AI571699, AI571909, AI560099, AW078650, AI866624, AI950100, AI690946, BG121335, AI932503, AL514689, AL036509, BF971336, AI446248, AW083804, AI081740, AI623941, BE965121, BE964576, AV647670, AI860027, AL514493, AA514684, AI491904, BE252769, AA693355, AW081242, BE965230, AI334893, AL514359, AI925196, BG110241, AI453328, AL513951, AI961286, BE963777, AI364135, AA767211, BG113188, AI824444, BE139128, AA937566, AI280747, AA744531, BE785348, AW131065, AI866798, AI565062, AW827290, AI524654, AL048323, AI866461, AI934039, AI579979, AI799158, AL048340, AI287489, AV681618, AI858310, AI690813, BE962857, AI440238, AI312428, AV724929, AI538764, AI927233, AI831308, H89138, AA844225, BE880209, AA580663, AI678446, AL513553, F34800, AW083750, BF680133, AW130356, AI310575, AI340603, AI633061, AI335363, AI538247, BG168054, BF764538, AI373276,

					BG029457, AI640799, AI360195, AI887775, AI273856, AI310606, AW189196, AI340533, AL514205, AW022636, BG250746, AL038505, AW151943, AI932915, AW190297, AI815855, AI401697, AW129659, BG024570, AL047763, BG180046, BG109270, AI933574, AI524179, AL513977, AA746619, AI922215, AL514791, AI624475, AI866465, AI539560, AI682958, AI022908, AL036403, BE964147, AW827103, AI926333, AI673278, AI961589, AW190808, AL514691, AW023590, AI307494, AL046849, AI343091, AL513817, AV755821, AW023338, AV758110, AA575874, AI634224, AI859991, AI932794, BG114012, AI476021, AI423326, AL514409, AV682867, AW022102, AL046942, AW059713, BF531023, AW118477, AI345736, AW402571, BG029053, AI573171, AV682218, AW163834, AI619607, AI624548, AI362522, BE873838, AW834282, AI963193, BE910373, AV743129, BE890041, BE964994, AL049085, AI582932, AI890887, AI638644, BF035924, AI681985, AI254226, AI983457, AI537074, AI953852, AI610667, BE843239, AI491775, AI274768, N29277, AI335208, AI828574, AI804983, AI523806, AI383804, BF814447, AI690738, AI590781, AI559752, AV756026, BE964997, BF965523, AW149268, AI521244, AV681837, AI312210, AA764946, AI636456, AI379711, BC006132.1, BC003591.1, AK025099.1, BC008364.1, AB060927.1, AK027188.1, AK025084.1, AF002985.1, BC006440.1, AL359583.1, AK025407.1, BC002688.1, AL512733.1, Z37987.1, BC002985.1, BC001963.1, AB056420.1, AL136915.1, S77771.1, AL136790.1, BC003683.1, AL110296.1, AL136844.1, Y16645.1, AF113222.1, BC007453.1, AL389935.1, AF232009.1, AK025015.1, BC008649.1, AB060873.1, AL390079.1, BC006494.1, AB060867.1, BC003619.1, AB050410.1, AL049382.1, AF143723.1, AF177336.1, AB060908.1, AK024974.1, AL137488.1, AL389982.1, BC003569.1, BC004431.1, BC003614.1, AK000074.1, BC008723.1, AK025708.1, BC001977.1, AK026462.1, U54559.1, AK024588.1, AK026528.1, BC008836.1, AK027213.1, BC000316.1, AL512718.1, BC006093.1, AB063100.1, Y14040.1, AB056809.1, AK024538.1, BC000725.1, BC004960.1, BC009284.1, AK026395.1, BC007920.1, BC002752.1, AF109683.1, AL080159.1, AK027161.1, X69819.1, AB063074.1, AB060916.1, AL080234.1, AL137529.1, AL389947.1, AL137658.1, BC002697.1, AL389939.1, AK000476.1, AK024594.1, AK000432.1, AL357195.1, AK026784.1, AK025435.1, AF125948.1, BC007796.1, AF159141.1, AL390154.1, AL122111.1, BC004958.1, BC006525.1, AK000344.1, AK025254.1, AL050155.1, AL122121.1, AF055917.1, S76508.1, L40386.1, AF358829.1, AK027116.1, AL049938.1, AF217998.1, AB050418.1, AK025906.1, BC008387.1, AB055352.1, AB048974.1, AF321617.1, AB052191.1, AL137476.1, X72889.1, AF081571.1, AL137463.1, AJ001838.1, AL133112.1, AF090934.1, AK026547.1, AF090943.1, BC006091.1, AK026480.1, AL137478.1, AL122050.1, AB055370.1, AL137560.1, AB060879.1, AB047941.1, AB048954.1, M85164.1, AL512746.1, AF090886.1, AL136825.1, AL133568.1, U78525.1, AL080126.1, AK026506.1, AL137539.1, AL117648.1, BC006332.1, AK026592.1, BC009026.1, AL359615.1, AL157479.1, AK027217.1, AB048975.1, AL137554.1, AK025573.1, AL162062.1, AL050149.1, AL137533.1, AL389951.1, BC003695.1, AB062750.1, AL122123.1, AL132981.12, AK026534.1, AK026542.1, BC008781.1, AK024992.1, AK025391.1, AK025092.1, AB063093.1, AK027142.1, AB063087.1, AB047609.1, AL137555.1,

					AK026647.1, AB055361.1, AL049430.1, BC001785.1, AL080154.1, AK027173.1, AK026659.1, BC000714.1, BC004130.1, AB052200.1, BC006458.1, AK000618.1, AL583915.1, AL442082.1, AL136787.1, AK027136.1, AK026593.1, AK025357.1, AL122049.1, AK026624.1, AF097996.1, BC003052.1, AF132676.1, BC005021.1, AL353957.1, AF061836.1, BC008488.1, AL137538.1, AL117649.1, AK025239.1, BC008078.1, BC004556.1, AL137254.1, AL137705.1, AL136784.1, AK000690.1, AK026600.1, AK000636.1, BC007021.1, AF230496.1, AK026408.1, AL080060.1, AL137429.1, AL133637.1, BC008920.1, BC008673.1, AK026374.1, BC006509.1, AL050024.1, AL110196.1, BC004925.1, AB050510.1, BC004951.1, AL050172.1, BC008844.1, AF183393.1, AK025119.1, AK025491.1, AK026630.1, AK000501.1, BC007567.1, AL136893.1, AL136747.1, AL117457.1, AK000310.1, BC009355.1, AF044323.1, AL110225.1, AL161964.1, BC001969.1, AL133113.1, BC004215.1, AL117435.1, U42766.1, AF106862.1, M92439. 1.
HTEBI28	550	462221	1 - 399	15 - 413	AW966413, AW444815, AI635348, AI146654, BF508527, AA789269, AI990377, BE502159, AA298815, T19416, AA834912, AA933749, AA934558, AA970840, AA298819, BF092040, AL121751. 12.
HTEDF80	551	587326	1 - 1292	15 - 1306	AA952940, AA719708, D45556, AA709370, AW628803, AI766729, AW966053, AW978634, Z21582, AW975618, AV718489, D80949, D80227, AV699447, T03269, AW966531, AW966534, D80269, D80253, C75259, D51799, AV722801, D58283, AV719557, AW959628, D80166, AV699550, AV718692, AV719822, AW978661, AV699927, D51423, D59619, AV720731, AW960553, D59859, D80210, D80240, AV719188, AW959570, D80212, AW973307, AV719324, D80188, D80195, D81030, D80391, AW975621, D51079, AV720211, D59889, D80219, AV720203, AV723927, D80196, AW966062, AW966054, D80366, AW949656, AW949642, AV718440, AV719783, AV720028, AW965177, AV718800, D59927, AV718844, AV720464, AV718770, AW966013, D80043, AV724520, AW965158, D80378, AW966041, D80193, D80038, AW959582, AV744011, AW949629, AV721386, AW949645, AW949631, AW949643, AW949657, C14429, AV719468, AW959202, AW949653, AW959597, AW966043, D57483, D80022, AW973447, AW949641, AW949633, AW949632, AW949618, AW966050, AV720812, F13647, D59275, D80241, AV700889, D59610, AV723097, AV718633, AW975605, AV720654, AW949646, AW949658, AV720791, AW949655, AW949654, AV742001, AV742667, AV701125, D80045, AV701335, AV701166, AV701043, AV701332, AV701017, AV701248, AV742048, AV701431, C14014, AW964488, D80134, AV701419, D59502, AV645389, AV742430, AV701154, AV699682, AW964737, AW959469, AV701443, AV745080, AV699669, AV701130, AV701149, AV645344, AV701422, AV719628, AV681510, AV681491, AV701415, AV701344, AW966560, AV701428, AW973470, AV681529, AV645343, AV721784, AV718674, AV701021, AW960474, AV681468, AV645383, AV645393, AV681528, AV681474, AV645339, AV681472, AV743601, AV681507, AV681465, AV681525, AV681495, AL390084.1, AF271371.1, X67155.2, D34614.1, D88547.1, AB033111. 1.
HTEDY42	552	135219 3	1 - 740	15 - 754	AA393537, AI187279, AA889534, AW002667, AA421499, AW003587, AA421468, AA709184, AW772510, AA397830.

HTEFU65	553	543396	1 - 1014	15 - 1028	AW072387, R83559, AI924465, AI364031, AW513660, BF361111, AA705541, AL162032. 1.
HTEGA76	554	381995	1 - 436	15 - 450	BF059486, AW293425, AI190540, AI201137, AI026778, AI016787, AA604883, AW172655, AA393061, AA709172, AC002456. 1.
HTEGI42	555	908143	1 - 964	15 - 978	BF792295, AW118908, AW956740, AA805770, AA578718, AA805757, AA808355, AA805773, N29112, AI760754, AI005113, AI204164, N21153, AI004282, AW956741, AI001990, BE564602, AI538204, AI188040, AI301191, AA383104, AW182071, AI192033, BE168090, AA861920, N31710, AA887975, AA976455, BF812960, AI249323, AI564247, AI619607, AI961286, AI819976, AI567612, AI632033, AI554821, AI934036, AI538116, AI251434, BE964614, BF826445, AW105601, AI818980, AI926790, H89138, AI269862, AI288285, AW079075, AI280747, AW055252, AI621362, AV648430, AI590423, AW054931, AI538885, AI609556, AA455772, AI824764, AI670009, AI280637, AI277255, BE965432, AW168650, AI801523, AI955906, AI312428, AI916419, AI573038, AA527133, AI340603, AI801322, AI609409, AI871923, AI817543, AI680388, AI310575, AI591311, AI612885, AI340533, AV707062, AL134598, BE965121, AI582932, AI648663, AI801544, AW084869, BE895585, AI610362, AI784252, AW167776, AI569583, AI862144, BG258298, AI538218, AL039276, AW827285, BE965621, AI247193, AV738991, BF791806, AW148457, AI572787, AW022682, AI917253, AL121365, AI873644, AI969641, AI273142, AI281837, AI587143, AI571046, AW193000, AW081036, AI918655, AW167410, AW169039, AI589267, AI431408, AI913330, BF812961, BE048081, AI251221, AI653840, AW152459, BG255895, AI560099, BF812938, BF816042, AW131428, AV703695, BE910373, AI634224, AI452876, AW169653, AI497733, AI866798, AI917123, AI439443, AW198090, AI559752, AL036980, AI608667, AW945539, BG254754, AW834325, AI888953, AI654601, AW089350, AW084447, BF813196, AW193134, AL120853, AL134999, AI694157, AA420722, AI887308, AW020693, BE047833, AI334893, AI620015, AW827207, BG163618, AW169149, AW081449, AI866770, AL036631, AV682227, AI270055, AI285735, AI633125, BG256592, AI670849, BE964497, AI539808, AW192701, AW168718, AI340627, BF970652, AW150273, AI568855, AI887450, AI498067, AI625094, AI670002, BG121959, BG029829, AI890806, AI612721, AW081298, AI801325, AI446373, AI890223, BF884999, AL038605, BE965471, AL513687, BE963085, AI570884, AI923989, AI284517, BE972174, AI963193, AV714036, AI818977, AI269205, AW268253, AW301300, BE966505, AI349598, AV726784, BE966699, AI302910, BE879911, AW075207, AL036664, AA579232, AI554344, AI627360, AW087932, AV702147, AI345735, BE886728, AL136671.1, AC004006.1, BC004370.1, AK026542.1, AF090943.1, AL133031.1, BC002733.1, AK026741.1, AL136754.1, BC004119.1, AF261134.1, AF056191.1, U42766.1, AB047904.1, AK024538.1, AL137521.1, AF091084.1, X82434.1, AB060825.1, AL050149.1, AF061943.1, AK026593.1, AL049938.1, AK000432.1, AB056421.1, BC001045.1, AL136845.1, AK027096.1, AK025967.1, BC006180.1, AK027164.1, AK026526.1, AK026631.1, AB060229.1, AL136622.1, AB062942.1, BC008899.1, AK026959.1, AL512765.1, AL122050.1, AK024974.1, AL050155.1, AL162083.1, AL049452.1, AK027204.1, AL133557.1, BC003548.1, AB052200.1, AL389947.1, AF260566.1, AL110280.1, AK026408.1, AL122049.1, AK000083.1, AK027213.1,

					AB048964.1, AK026613.1, AL442082.1, AB062750.1, AL133560.1, BC007326.1, AK026894.1, BC004899.1, AK026744.1, AF090903.1, BC001056.1, AK024622.1, AL050108.1, AJ010277.1, BC004556.1, BC007199.1, AK026629.1, AK026534.1, Z82022.1, AF120268.1, AL117460.1, AL137550.1, AL049426.1, AL137463.1, AB051158.1, AB060893.1, AK026522.1, AK026855.1, BC008485.1, BC008719.1, AL133075.1, AL117457.1, AL050116.1, AF125948.1, AL136892.1, BC006807.1, AK024524.1, BC008488.1, AK026504.1, AF097996.1, AL049430.1, BC002485.1, BC005168.1, AB063046.1, AK025092.1, AL137538.1, AL117649.1, AB060852.1, AL512689.1, AL359601.1, AK026927.1, AL096744.1, AF111847.1, AL117435.1, AL136787.1, AL133606.1, BC008365.1, BC002365.1, AB060826.1, AL359622.1, AL050024.1, AL390154.1, AB050510.1, AL137560.1, BC001967.1, AK026045.1, AL049314.1, AB060863.1, AB048954.1, BC007926.1, AF183393.1, AL136915.1, AL080127.1, AK025524.1, BC000570.1, BC008417.1, AL050146.1, AL133619.1, X72889.1, AB049892.1, AK000618.1, BC009212.1, AF090900.1, AL353940.1, AL389935.1, BC000778.1, AK027116.1, AF078844.1, BC008983.1, AL050277.1, AK026583.1, AL122098.1, Z37987.1, AL133113.1, AK024546.1, AL049464.1, AL137557.1, AF141289.1, AL512733.1, AK025491.1, BC004958.1, AB047801.1, AK025254.1, AB049758.1, AJ012755.1, AF230496.1, BC007021.1, AK000718.1, AF239683.1, BC003687.1, BC003627.1, AB063070.1, AK000445.1, AK025339.1, AL049466.1, AL136844.1, AK026784.1, AL122093.1, AB060214.1, AL136799.1, AF271350.1, AF026816.2, AL359941.1, AL136928.1, BC008070.1, BC006832.1, AL110296.1, AL137459.1, AB055366.1, AK025798.1, AK025573.1, BC000317.1, AL136789.1, AK000310.1, AL359615.1, AF146568.1, BC001969.1, AL050092.1, AL050393.1, X98834.1, AL390167.1, AB019565.1, AL133093.1, BC008382.1, AL137283.1, AB060914.1, AL080074.1, AL512719.1, AL136786.1, AK025906.1, AK027173.1, AL137648.1, AB055315.1, AK000212.1, AB060929.1, AK026659.1, AL117585.1, AL136768.1, AL136747.1, AK026434.1, BC002473.1, AL157431.1, AL110225.1, AK000391.1, BC008893.1, AL133565.1, AK026647.1, AL122123.1, AF207829.1, AK026532.1, BC008387.1, AK025391.1, AL049283.1, AK026480.1, AL136640.1, AK026353.1, AB060916.1, AJ242859.1, AB052191.1, AB063071.1, AK026452.1, AL136586.1, AL080137.1, AL117394.1, AL137488.1, AB062978.1, S78214.1, AL080124.1, AL122110.1, AL512750.1, AF090934. 1.
HTEHR24	556	835894	1 - 1061	15 - 1075	AI419884, AI809484, AA824354, AF203447.1, AL136096. 7.
HTEHU93	557	722254	1 - 724	15 - 738	AW665128, AA843468, AA918572, AA437250, AA759355, AW665453, AA436982, AF059244.1, AL109954. 15.
HTEIP36	558	520468	1 - 738	15 - 752	AI695417.
HTEIV80	559	584798	1 - 1734	15 - 1748	AI349829, AI598077, AW936372, BE785942, BF954789, AI345549, AI340720, BE063579, AI252097, AI242057, AI032071, AI251249, AI793142, AV744706, AW514333, AI703269, AV710534, AW301368, AI652516, CI7730, AW888958, AW023124, AI336584, BF848969, AI685116, BF752041, AW075887, AI818151, AW974025, AI254827, AI822052, AI872435, AW301750, AI873822, AI921101, AA954995, AW268051, BE175422, AA446110, F16640, AI087951, AI191894, AI635355,

					BF931047, AA383566, AI377100, AA777615, C03348, AW268787, AW513247, AA587929, AA489231, AA832402, AW614777, AA402308, AW665144, AW795537, AW572610, AW956753, AW339583, AI868494, AW043812, BF513880, AI422008, BG006598, AV713025, AV648638, BF222519, BF957535, AI095021, AI803354, BF762181, AW838167, AI051341, BE891786, AW955404, AW088343, AA359513, BF594779, R81942, AI627336, AA771958, AA862135, AW853664, AI249995, AW867766, AW936566, AI570164, AI493146, AL036364, AL038713, AW264200, BF475948, AI824585, AU159276, N68060, AL046289, AA468571, AW102963, BE149642, AI245554, BF338824, AA406181, AA766076, AA826143, AI054162, AA804482, BE749129, AW016003, AL110348, AA584498, AI621138, AV690362, AA992185, AV691305, AI308534, AV695638, AV693309, AW157413, BF809037, AI369914, AV748735, BF576607, AI860800, F33837, AW516500, AV730830, AL162212.12, AC084239.1, AC018503.6, AC026189.4, AC006473.3, AC023480.6, AC018822.7, AC066587.4, AC005799.1, AC073387.4, AP001699.1, Z84470.1, AC004385.1, AC012558.8, AL450169.1, AC026341.17, AC007436.1, AC010739.3, AC002564.1, AL355916.2, AL356432.17, AL035594.7, AF279660.2, AL355520.8, AC016720.9, AC002429.1, AC007221.2, AL139115.5, AC007278.3, AP001671.1, AL357559.16, AL117191.6, AL355518.20, AC006500.4, AL109759.4, AC009247.12, AC016046.1, AL512283.12, AL157774.14, AL357041.11, AL139395.6, AC024095.13, AC006368.2, AC011745.4, AL035551.6, AF002997.2, AL160036.12, AL513011.7, AC005599.5, Z93403.1, AC020581.8, AF274856.2, AC009329.20, AC090042.1, AL357095.4, AL158196.24, AC002529.1, AL161901.18, AP000019.2, AL109620.4, AC004552.1, AL356916.17, AC009226.3, AL161912.15, AC011500.7, AB020869.1, AP002436.3, AC009961.11, AC016144.13, AC003084.1, AC004673.1, AC079175.24, U95743.1, AL022148.1, AL163206.2, AF207859.1, AC007514.5, AC025613.14, AL132670.18, AC060231.6, AC010450.6, AL353788.33, AC003677.1, M80340.1, AF196972.1, AL118523.18, AC007429.11, AL391986.12, AC005053.1, AL136987.11, L19088.1, AL031407.3, AL049831.2, AC023669.8, AL035688.8, U09115.1, U09116.1, AC004866.1, AC004757.1, AL389921.12, AC079178.20, AC073597.20, AC009478.4, AC009269.6, AL391595.14, AL161940.6, AL035633.18, AL158159.14, AC004200.1, AC002080.1, AF242452.1, AC073258.9, AF054599.1, AC016642.5, AC025770.5, Z93019.1, AL035464.20, AL121946.20, AC007037.4, AC018680.4, AC072063.5, AC002122.1, AL133474.9, AC006213.1, AF222686.1, AC020892.7, AP001713.1, AL161665.5, AC008277.4, AL031278.1, AC009289.8, AL031446.7, AC008250.23, AL159152.11, AL445466.9, AC012492.9, AC009479.4, AC025887.4, AL163642.4, AC006131.1, AL022144.1, AL138965.10, AC007611.5, AL499582.13, AC006840.17, AL136441.16, AC078851.4, AC004833.1, AC008174.2, AP001860.2, AL359332.2, AC002368.1, AL031117.1, AC010478.5, Z98950.1, AC005731.2, U51899.1, AC021017.4, AC034246.4, AC008935.8, AC009508.3, AL033538.1, AL050309.4, AL049741.7, Z98880.1, AL031681.16, L19092.1, AL022308. 1.
HTEJN13	560	135227 2	1 - 1080	15 - 1094	AV701671, AI357650, BF438669, AI768345, AW007363, BE044135, AA757064, AI338828, AA813593, AI422179, AI198874, AI090848, AV717855, AI090870, R68504, AA974687, AV705429,

						AI978569, AI694830, AI139115, T84300, R68213, AI129184, Z21304, AW014824, Z21445, AI5557079, AF226731.1, AL390195. 10.
HTELM16	561	834058	1 - 517	15 - 531		AI651078, AW193716, AA833735, AI656090, AA939044, AI005061, BE550563, AA972135, AW173087, BE551605, AI807541, AW235353, AA769984, AI631437, BF755659, BF755660, AA910026, AI954833, AA442458, AW236934, BF478195, AW291899, AA807414, AW003815, AA436650, AI001919, W26260, AW070283, AW302924, AI344928, AI344933, BF968779, AI335449, AL031650.22, AL121751. 12.
HTEPG70	562	834931	1 - 799	15 - 813		AW001355, AA426091, AW182920, AI698237, AA844647, AW592578, AA436649, AA936263, AW072458, AA678521, AA442457, AC005789.1, AC005625. 1.
HTGAU75	563	597467	1 - 1699	15 - 1713		AI445595, AI453185, AV761152, D31303, AV735609, AJ224878.1, AJ240085.1, AJ240084. 1.
HTGEP89	564	410582	1 - 689	15 - 703		AV762334, AI300541, BG109719, AW663660, AA988368, AA927889, AA417006, AI2066569, AA417219, AI005145, AI810124, AA723941, AA620800, AA917882, AA912169, BE927871, AA732367.
HTHBG43	565	919911	1 - 834	15 - 848		AA830144, AW196413, AW662711, AA346392, F01235, Z28908, AA704393, AV754716, AA602906, AI061313, BF804385, AA284247, AI609972, AW265614, AA491955, AW872574, AA715814, AW855528, AA552586, AW188742, AA622801, AA720774, AA502532, AA169245, AW238253, AI611533, BF870792, AI612070, AI301475, BF920612, AA528503, BE906142, AA558404, AA530958, AP003357.2, AP000555.1, AL049838.3, AC020906.6, AC003043.1, AL138878.10, AL031727.42, AC074338.1, AL355792.8, AF031078.1, AL022396.1, AL354932.26, AF030876.1, AL049637.43, AC005736.1, AP000116.1, AL133448.4, AL358777.12, AF243527.1, AP001712.1, AC016968.24, AC008736.6, AC073345.10, AC010271.6, AC007546.5, AC007687.16, AL035555.10, AL031678.2, AC010205.5, AC005940.3, AC002996.1, AC002565.1, AL162587.20, AL031228.1, AL109935.39, AL009181.1, AF168787.1, AP001331.1, AL031728.12, AC010150.3, AL157372.18, AC007731.14, AL049653.7, AC004821.3, AC005500.2, AL138759.20, AC009077.7, AC011527.4, AL022320.23, AL034405.16, AC018755.3, AC004611.1, AC021849.5, AL138837.12, AC007011.1, AC002300.1, AC007917.15, AL390209.1, AB038653.1, AL035462.21, AL391834.8, AL121928.13, AC006057.5, AC002432.1, AC009756.9, AC005098.2, AC009721.9, AL109947.19, AC010311.8, AC024563.4, AP001717.1, AL138752.5, AL009172.1, AC000035.2, AC002549.1, AL359494.17, AL008726.3, AL354766.17, AL353807.18, AL138743.5, Z84466.1, AL162424.20, AC073326.6, AP001748.1, AL118501.22, AC010768.9, AC005790.1, AC004222.1, AL035685.21, AC008946.6, AC009570.13, AL121972.17, AC004903.2, AC027130.5, AL049869.6, AC005215.1, AJ009613.4, AC009408.3, AC024561.4, AC005071.2, AL162426.20, AC003104.1, U80017.1, AL117382.28, AL132716.6, AC006581.16, AL122020.5, AC066597.4, AL031447.4, AC011445.6, AP001726.1, AL163279.2, AP001715.1, AC018828.3, AC005067.2, AC005288.1, AL137853.12, AC022383.3, AC010618.7, AL136295.3, AL133453.3, AL591398.2, AF067844.1, AC004032.7, AL034423.21, AC005971.5, AL353692.14, AL136170.12, AC006014.2, AC013467.8, AL117336.22, AC044797.5, AL158817.11, AC020552.4, Z83840.7, AL137077.31, AL031658.11, AC083863.2, AC007055.3,

						<p>U82828.1, AC020913.6, AL390294.19, AC004253.1, AL132777.4, AC009086.5, AC011890.4, AL359397.3, AL022311.5, AC007993.15, AC000003.1, AC008427.7, AL513366.11, AC005939.1, U52111.2, AC010489.4, AL512666.6, AC005972.1, Z98884.11, AL137073.13, AC037475.9, AC011236.8, AC005520.2, AC011811.42, AC004089.25, AL137791.19, AP003465.2, AF064863.2, AC005031.1, AL031681.16, AL160163.24, AC009144.5, AL132640.4, AC016995.4, AC006208.3, AP001725.1, AC005089.2, AC011444.5, AF064861.1, AC000025.2, AL133373.5, AC002504.1, AL121891.22, AL358972.13, AF207550.1, AL133445.4, AC005368.1, AC006241.1, AL035659.22, AC011467.7, AL162417.22, AC005527.3, AC078962.30, AL139809.16, AC007991.7, AL096701.14, AC083884.6, AL121992.24, AL121594.6, AL136126.34, AC010458.5, AP002078.3, AC006966.3, AC004659.1, AC005086.2, AF229163.1, AC067722.21, AL031846.2, AP000257.1, AP002982.2, AC005081.3, AC005363.1, AC009068.10, AC007684.3, AL035587.5, AC010363.6, AC020626.6, AP001709.1, AL132639.4, AF190464.1, AC002301.1, AL133294.10, AC004778.1.</p>
HTHCA18	566	908144	1 - 1804	15 - 1818		AL137141.10.
HTHDJ94	567	693652	1 - 1618	15 - 1632		<p>AI290720, BG254585, BG251513, BG110633, BF526061, BE792285, AV704068, BF339939, BF338838, BG030014, BE615467, BF980189, BF308716, BE784543, AL533775, BF791036, BE880218, BF038786, AW955868, BG121135, AI741602, BE895986, BE264712, BE299196, AW886849, BF089485, BF089484, BE297034, BE311846, BF089488, BE270310, AL513740, BF671575, BE266974, BE299140, BF238947, D79185, BE294911, AW024422, AA401528, BE296524, AA417131, BF693821, AI333681, BF979464, W47348, AA280813, AW952740, AA905310, AA569922, AA573334, BE834263, AA902128, AW027880, AA570689, AI312759, AA976250, BE843385, AI092605, AA558902, AA151226, AI041784, AW262597, AA280806, N36166, W32108, AA151227, AA406299, AI090180, AA781961, AA115004, AI623395, AW239455, AI027447, AA065116, AI377228, N59607, AA451762, AI804317, AA724950, AA449952, AA450034, AA115005, AI186329, HI0448, AA482977, AI242335, AW750196, AA453022, BF351185, BF091398, AI032607, AI804465, AA640751, BF307134, C16610, AI149260, AA987598, AA781332, BF725960, AI804069, AA973798, AA452663, AA127134, AA872873, H82385, T86790, T82258, HI0449, AV708991, BE122892, BG010794, F30722, BF955515, BE843374, BF742632, BF845452, T78950, W32213, AI424359, AA338139, BF515881, AA296988, T78898, AI285049, BE896826, AI278719, AA451764, W47452, AA541483, F06459, Z28571, BF091416, Z39388, AA297494, T86695, AI318411, F01234, AA808781, AA297421, AI991656, BF091818, BF091384, BE934690, AA661544, D31389, AA280856, AA280942, BF853987, AA064799, Z24822, BF826594, AA031579, AA298704, BF826595, AI670708, AW238447, AA494107, BE843391, AA296942, AA031458, AA297411, AA297354, AW748868, AA099261, AA098866, T83540, AA297420, AI675090, AA194682, BF091419, BE937871, AL533776, AA297201, D20890, BE937861, AI908416, AA897425, AA368017, AA530981, BF755678, BE140557, BE871498, AW881778, AA411374, H70649, AA449811, F24096, AF125533.1, AF169481.1, AF091084.1, AK027319.1.</p>
HTHDS25	568	772559	1 - 1047	15 - 1061		<p>AI801504, AA385855, AA812703, AA349881, AI254831, AW293292, AI963714, BF674168,</p>

					<p>AW967329, BE241437, T08386, AI521458, BF855114, AL357075.17, AL031668.23, AL358976.11, AP000067.1, AC004089.25, AL357519.19, AC005015.2, AL034417.14, AC004491.1, AC004962.1, AL133353.6, AC004634.1, AC022027.5, AC060231.6, AC004084.1, AB043547.1, AP000304.1, AL139390.15, AP000047.1, AL080243.21, AC004841.2, AL035685.21, AP000115.1, AC008957.7, AL035684.25, AP001717.1, AC015982.9, AC020916.7, AL139230.25, AL096773.6, AL137073.13, Z85996.1, AC010386.5, AC005098.2, AC003010.1, AC004166.12, AC005488.2, AC012170.6, AC005972.1, AC008507.8, AC008569.6, AL049198.2, AL133354.14, AL357507.9, AC008771.4, AB014077.1, AC011479.6, AC079171.21, AC004156.1, AL157823.9, AL356464.15, AL138976.5, AC002126.1, AL133507.8, AL024498.12, AC008766.4, AC020904.6, AL035073.7, U91323.1, AC005103.3, AL078633.32, AF047825. 1.</p>
HTJMA95	569	706618	1 - 1636	15 - 1650	<p>AI608603, BE140256, AW872982, BF832764, AW352295, AI767967, AW085774, AW238519, AA863266, AW606064, AW117932, AI310728, BF105292, BF350121, BF825661, AW772195, AA865790, BE889218, AA864183, BF354847, BF832729, BF832728, BF354850, BF350182, BF354844, AI141812, BF354848, AI355569, AA595971, BF354846, BE350405, BF825662, BF353627, AW080463, BF353788, U75833, BF736474, BE141732, BE141331, AF193809.1, AF081497.1, AF284446.1, AF185277.1, AF219986.1, AF219985.1, AF219984.1, AF219983. 1.</p>
HTJML75	570	104004 7	1 - 2748	15 - 2762	<p>AL521803, AL521804, AL535427, BE397366, BE562398, BF974996, BE561712, BE744093, BE397614, BE271237, BE562082, BE397567, BE275147, BE734376, BE409602, BE514409, BE561529, BE561508, AL535426, BE513947, BE269836, BE397322, BF025695, BE730298, BE397518, AW024974, AW303401, BE270550, BE277764, BE304392, BE747750, AW954868, AW954834, BE397865, BG104371, BF125819, BF892698, BE207701, BE296686, BE397490, BE271132, BE207727, AI274799, AW074233, AI679074, BE391918, AW732734, BE562087, AI499422, AI827575, AI928361, AA160606, BE267895, BF002414, AA315776, BE547421, BE644853, AV696893, AV684921, AW450819, BE268902, AI016059, AW249651, BF155203, BF437505, AL527262, AW079518, AI365272, AI338083, AA729126, AA831884, AI440443, AI283488, AI925468, BF237940, AI274761, AI983318, AW300875, R42025, AL527263, AA313959, BE268253, AI240111, R20845, R37892, BF970572, BF813074, AI187826, R33244, R64261, R33245, AA862592, AA984343, AW087285, AI984649, AA580394, BF902892, BF810667, AI795901, AI2233980, H29720, R25583, AA283458, BF983060, AA928568, AW843336, AL513839, AL515041, BE894530, AL134259, BE048071, AI690835, AI920968, BG120816, AI952114, BG032704, BE904051, BG164371, BE048179, BF726198, AV696257, BG180034, AI491852, BG180996, BF882334, AI499463, AW301410, BE966388, AL135661, BF726504, AL045903, BG260037, AI539153, BG112879, AI349933, BF680131, BG058398, AW274192, AW148320, AW074993, AL036361, AV702623, BF970990, AI312152, AI873731, AW150578, AI345735, AV757943, AI868831, AW302992, AW238730, BG168696, BE966775, AI307708, AI608667, AV681731, BF924882, BG109270, BF812933, AW071417, AL513985, BE964876, BE964636, AL036146, BG249582, AL120854, BF794994, AL043326, BE047852, BF792469, AL036403, AI686926, AI521012, BF342070, BG114104,</p>

					AK000647.1, AL512761.1, AF260566.1, AK025414.1, AB060929.1, AL137463.1, AL122110.1, Z82022.1, BC008485.1, AK026528.1, AK000432.1, BC008899.1, BC004951.1, AB052200.1, AL137271.1, AK027164.1, BC008382.1, AL512684.1, AL137538.1, AK025967.1, AL136786.1, AL512689.1, AK025524.1, BC008983.1, AK024524.1, AK025391.1, AL359583.1, AK026947.1, AL122098.1, AB063084.1, AK000718.1, AL050024.1, AK026630.1, AL512765.1, AL162062.1, AK024588.1, AF348209.1, AL137648.1, AL353625.5, AL121656.2, AK026629.1, AK025632.1, AL080127.1, AB049892.1, AL133104.1, AK025906.1, AL110197.1, X72889.1, AL359622.1, AK026526.1, AK026480.1, AK026597.1, AK027116.1, AK025254.1, AL137521.1, AK025484.1. 1.
HTLAA40	571	519329	1 - 942	15 - 956	AW970655, AL037327, T63134, AA523995, AA437219, AI809780, AI313360, AA442282, AA868090, AA024526, AU156297, AI222715, AA024525, BF092179, BF092219, AA405033, AA412681, AK001866. 1.
HTLBE23	572	902187	1 - 1202	15 - 1216	BE387950, BE391867, BF373101, AI024399, BE728010.
HTLEP53	573	634852	1 - 804	15 - 818	BF876683, AI755202, AI066646, AW613805, AA084609, AW769151, BE169870, AA601674, AI561210, BF926568, AW265614, BF826830, AI613389, AL042667, AL042670, AW130427, BF868994, AW471092, AV760019, AW576485, AI281818, AA225956, N64587, AU157209, BF941382, AI340151, AI859834, AW328202, AV754716, AW501278, BG2222269, AI955029, AI134440, AI799569, BG250286, AW518030, AW576437, BF725884, BE396138, AW974363, T05118, AA524616, AI732682, AW268329, AI192440, AA669741, AW166920, D58782, AI653493, AW238341, BE301068, AI955718, BF923179, BF526964, AW438850, AW438662, U95742.1, AC019205.4, AC027125.4, AL356299.16, AC007216.2, AC008649.6, AC005484.2, AC005098.2, AC005740.1, AB020868.1, AC008569.6, AL359091.10, AL136527.9, AC005527.3, AC005000.2, AC005529.7, AL121809.6, AC090883.1, AC006312.8, AC004166.12, AF250325.1, AL008726.3, AL139396.17, AC010913.9, Z85987.13, AL590762.1, AL121658.2, AJ246003.1, AP001781.4, AP001694.1, AC004867.5, AL133312.3, AL513550.9, AC008507.8, AL022476.2, AC005520.2, AC068533.7, AL160163.24, AC011485.6, AF111167.2, AC002544.1, AC004702.1, AL158141.14, AC005071.2, AC007191.1, AC005229.1, AL357515.26, AC010412.7, AL161670.4, AF196972.1, AL135927.14, AC007227.3, AC083884.6, AC004089.25, AL445483.13, AF165926.2, AC009060.7, AL359235.3, AC002350.1, AC005952.1, AC007052.4, AC020558.4, AC035071.17, AP000510.2, AC007731.14, AL121586.31, AL354815.10, AC005500.2, AC006014.2, AC005015.2, AL161893.24, AC005726.1, AC004985.2, AL161725.13, AC002390.1, AL450265.11, AL353135.32, AL160231.4, AC026672.44, AC004466.1, AC060231.6, AL360227.17, AL117382.28, AL021397.1, AC083863.2, AC011487.5, AL158824.11, AC018638.5, AL031283.26, AL121761.5, AC004242.1, AL020993.1, AL512641.9, AL121936.17, AC005280.3, AL035587.5, AC020916.7, AC067941.7, AC009812.17, AC012476.8, AL136228.8, AP001728.1, AL354808.24, AL049561.16, AL352984.4, AP000046.1, AC010378.6, AC000381.1, AC006480.3, AC006023.2, AL050308.9, AC005531.1, AL049776.3, AP000114.1, AC008551.5, AL031680.20, AL391827.18, AP001360.4, AL354707.17, AF111168.2, AL031683.2, U89337.1, AC010605.4, AL035367.5, AC002546.1, AL138724.12, AL033521.2,

					AC020906.6, AC078846.2, AC006452.4, AC007003.4, AC009244.24, AL049547.10, AL163279.2, AF064861.1, AC000025.2, AC027319.5, AL391280.15, AC008083.23, AC004253.1, AC008598.5, Y10196.1, AL049766.14, AL512666.6, AL138784.30, AC008891.7, AC004840.3, AC083873.3, AC005377.2, AC000360.35, AL049637.43, AL512378.7, AC008753.8, AC005488.2, AF001548.1, AC010422.7, AC009179.17, AC008623.4, AC004876.2, AP001717.1, AP001709.1, AC011465.4, AP000901.5, AL160471.5, AC006329.5, AL034405.16, AC008521.5, L44140.1, AC008481.7, U15177.1, AL162578.13, AC006449.19, Z97876.1, AC016830.5, AC008946.6, AL137792.11, AL109743.4, Z83844.5, AL049631.7, AC025275.4, AC091736.1, AP002453.3, AC006512.12, AC004491.1, AL356095.11, AC005291.1, AL136297.3, AC003982.1, AL022318.2, AC009086.5, AC005736.1, AC004824.3, Z84466.1, AP001670.1, AL157823.9, AC018904.6, AC002425.1, AF312032.1, AL109806.22, AL035413.19, AC006027.1, Z84469.1, AL513366.11, AC011737.10, AF196779.1, AC026756.15, AC008745.6, AC090527.3, AC006038.2, AC005318.1, AL391137.11, AC010543.8, AC005081.3, AC005522.2, AC005231.2, AC013726.7, AL109804.41, AC005399.19, AC004832.3, AC022148.5, AF134726.1, AC022007.3, AP002851.2, AL136084.11, AL031295.1, AP001748.1, AL121834.20, AC007686.5, AL049872.3, AC002027.3, AP002851.2, AL136084.11, AL031295.1, AL133551.13, AL136966.27, AC004167.1, AP000237.1, AL117186.3, AL161747.5, AC005288.1, X54156.1, U94788.1, Z99127.1, AC016691.10, AC016025.12, AC010526.7, AC004890. 2.
HTLFE42	574	460583	1 - 698	15 - 712	BF059319, AI650872, AI341317, BE466535, AI650461, AI654221, BE552027, AI968418, AW002998, AW589844, AW593389, BF056905, AW274932, AW071622, AI979302, AI656601, AW138584, AI968442, AI968447, AW589880, AW003907, AA872876, AA922983, AI202932, AI627402, AW025629, AI655703, AW294061, AA398061, AI797621, AA833619, AI341052, AA992699, AP001579.1, AL163301.2, AL133499. 2.
HTLFE57	575	135231 0	1 - 2234	15 - 2248	BE618638, BE740875, BF688973, BF967557, BF967636, AW954531, BE742276, BF344608, BF966747, BF688501, BE314602, AV689075, BE881450, AV692451, AA402818, BE798735, BE392990, BF920872, BF439279, BG027910, AV698578, BF448645, BE250966, AA402161, AV686818, AI093167, AI150344, AI885410, U55991, AI160520, BE387679, AI523831, AI884689, AA018419, AA056110, AI080305, BG005830, BE394913, AI050824, AI141148, AW024987, AI870771, AW576097, N31844, AI809311, BF526976, AW771597, AI493689, AI339583, BG056680, AI200955, AI356543, AA419249, BF969738, AA306397, W72743, AA454906, AA041404, BE395222, AI143075, W58112, AI149739, AA436620, AA400067, BG056220, AA393477, AA861445, AW028724, AA573258, AI809303, BE671746, BE552382, AA259063, BE908638, AI220513, AA058572, W77922, AI087206, AA652366, D80807, W58172, AI074184, AI339724, AA132154, W31498, N72499, AI572664, AI933312, AI914114, AI219592, BE255290, AA649907, AA210767, AW970375, AW970296, AA970516, AW970376, AA594872, AI094655, AA733140, AA470469, AA631598, N23943, BG025452, AA041503, D80744, AA579798, BF967827, AW071229, T61071, AA534640, AA918880, AW016176, AA324492, AA657952, AV698775, AI244822, AV692171, HI9641, AV691057, BF949226, D80745, AI032420, AV716910, AA534821, AA994420, AA725667,

					H41099, H20475, AA336112, AV690336, AV686938, AV690324, AI621277, AI380715, T19169, AI365036, AI079603, AA259064, BF222015, AA954727, AA324170, AV683588, AV683813, N80749, AV684716, W04578, AA324169, T34444, AI073475, AA626841, AW406751, AV686781, AW970290, T34432, AA507208, AA349561, H20476, AA211889, AA383421, AI372711, AI817408, AA948293, AA812861, AA320028, R64311, AA863481, BF967414, AI763093, AW262487, BF967482, T85783, AA400850, AA454831, BG036741, AI138838, BF196321, BF940724, AA018438, R51375, BF945161, AA779645, BF514380, AA401573, AI372712, AI372710, T61174, T65029, T08467, BE618092, N91047, AK026031. 1.
HTLGE31	576	103513 0	1 - 520	15 - 534	AA714179, AW051497, AI971919, AI094911, AW055123, AA293722, AI094408, AA631985, AL445222.9, Y17801.1, AJ245937. 1.
HTLHY14	577	838460	1 - 1018	15 - 1032	AW182303, BF530991, AA885453, AA913620, AI024359, AI218809, AA436925, AA904573, AA729136, AA448181, AA431731, AI768931, AI138595, AA868685, AV721013, AI191602, AA970192, AI004977, H19402, AA496009, T19190, AI024060, AI015490, AA860370, AW081876, T05239, AA810634, AA609572, AA824562, AA789135, AA904853, AC005328.1, AC005545. 1.
HTLIT32	578	833906	1 - 1060	15 - 1074	AA430173, AA813342, AI688054, AI656828, AA431616, AI014589, AA446480, AI335754, AA759304, AW340541, AA912641, AA923430, AA431328, AA725624, AC020956.6, AC010616. 5.
HTLIV19	579	104634 1	1 - 964	15 - 978	H73550, AA715075, AA425924, AI792525, AA303049, AA715173, BF895531, AW086361, AV733366, AI348722, BE168680, BF880342, BF725844, BE464794, AI862231, AI033519.42, AL138706.9, Z82244.1, AC004000.1, L78810.1, AP002453.3, AL117382.28, AC004491.1, AC005399.19, AL354798.13, AC004867.5, AL022326.1, AC006160.9, AC004805.1, AC018801.4, AC022007.3, AL133444.4, AL356481.16, AL121751.12, AC008687.4, AC002369.1, AL353668.18, AC011495.6, AF279660.2, AL132640.4, AC004263.1, AC009077.7, AC005105.2, AL450169.1, AC025262.27, AC007425.16, AL050349.27, AC004887.2, AL022396.1, AC040160.4, AC018642.6, AP002340.3, AC074331.1, AE006462.1, AC002073.1, AC003070.1, AL031767.13, AL133153.3, AC007263.4, AC004882.2, AL050341.18, AC005921.3, AC007619.22, Z98200.8, AB003151.1, AC008050.6, Z92542.2, AC010305.3, AL157789.6, AC002300.1, AL020997.1, Z97989.1, AL023281.1, AL021707.2, AC079602.15, AC007225.2, AF243527.1, AC008267.6, AC007279.4, Z83840.7, AP001694.1, AL096764.11, AL031602.14, AC008895.7, AL391280.15, AC007073.2, AC005225.2, AL109614.28, AC008403.6, AL354808.24, AL138752.5, AL162430.15, AC008569.6, AL450104.14, AC007005.3, AL355392.7, AL135548.6, AL121997.7, AL034380.26, AL117352.12, AC009267.15, U91321.1, AL391827.18, AC022383.3, AC025438.5, AC091118.2, AC074013.5, AC002299.1, AL354797.16, U91326.1, AL034420.16, AC012384.16, AC022212.4, AL096840.25, AC005200.1, AC011489.6, AC008009.4, AL139317. 5.
HTNBO91	580	519313	1 - 286	15 - 300	AW194713, AI911340, AA601540, AI434870, AI810614, AA975093, AI026153, AW594027, BE502581, AW151600, AW196248, AW627679, AI669568, AA976768, BF437810, BF439076, AA975123, AI749464, AW966620, Z19502, AW196675, BE465426, BG120409, AA385366, BE221802, BE697980, N55869, AW631460, AK000497.1, AL136231.12, AB050415.1, AK000646. 1.

HTOAK16	581	560744	1 - 1452	15 - 1466	AU145310, AW274654, BF838423, AW139789, AW205436, AA017033, AU118838, T87405, AI143925, AI174470, T87300, AA019253, AK021714. 1.
HTODK73	582	526021	1 - 1005	15 - 1019	AI347130, AW027513, AW954660, AI660559, BF063427, BG230588, AI340321, AU155474, AI214222, AW006987, AI803717, AW301687, BE221184, AW016409, AA018238, AA019155, AI336534, AA015924, AI283525, AA921711, AA307210, AI090373, AA878131, AI269256, BF761125, AA017114, AI857978, BF229860, BG030487, AI368031, H84864, R84448, AW403382, AI367923, AW900223, AI284356, AI080385, AI350788, F29712, BE251142, AL536301, AA987803, BF761104, BF808782, AA017329, AA018635, BF593228, AA534529, BF851700, AL536302, W21988, BE910304, AA280994, AB031051.1, AL357033.19, AF205072.1, AK000551.1, AF104334.1, AK023410.1, AF187817. 1.
HTODO72	583	532001	1 - 959	15 - 973	AI401101, AI801654, AC005628. 4.
HTOGR42	584	838160	1 - 1416	15 - 1430	AA573067, H30513, AI266619, R20206, AW084004, AI064724, AW851828, BF031134, AA773890, AA507343, AL031295.1, AL355343.18, AC005031.1, AL354932.26, AC044797.5, AL356019.5, AC011994.10, AL034420.16, U80460.1, AL031281.6, AC022392.4, AC073657.5, Z99716.4, AF196779.1, AC009144.5, L44140.1, AC008440.8, AL049776.3, AL031847.17, AC010378.6, AL136418.4, AL139054.1, AC004797.1, AL353777.18, AL117382.28, AC005231.2, AC008521.5, AC002425.1, AC011446.6, AB023048.1, AL139113.21, AL355480.22, Z97196.1, AC008753.8, AL031685.18, AL160271.19, AL109952.15, AC004999.1, AC021012.5, AL355093.3, AL512883.5, AC007055.3, AF001550.1, Z95115.1, AC008745.6, AL021579.1, AL136304.10, AL121886.22, AC009086.5, AC003109.1, AC004953.1, AC005052.2, AL137229.4, AC005379.1, AC068724.7, AL135744.4, AL121890.34, AL589723.7, AC012170.6, AC005288.1, AC006538.1, D86995.1, AP000098.1, AC003007.1, AC009412.6, AL357497.17, Z83844.5, AL356575.8, AL031680.20, AL354735.14, AC007216.2, AL445071.14, AL136123.19, AP001710.1, AC008372.6, AP000901.5, AC025540.7, AF129756.1, AL355336.15, AP001717.1, AC008149.14, AC010279.4, AC008018.20, AC011487.5, AC003041.1, AL159997.14, AL080243.21, AF001549.1, AL135839.15, AC078962.30, AC008733.7, AP000504.1, AL132713.11, AL365505.15, AC005632.2, U62317. 2.
HTOHM15	585	102853 8	1 - 1935	15 - 1949	AL118824, AA573022, AI754263, BE675104, AW272936, AI339372, BE349264, AA767823, AI379332, AI568638, BG057649, BE857312, AI870434, AI424042, AI203588, AI338543, AW080903, AI350585, AI827956, AI874102, AI304572, AW675567, AW029133, AA456303, AI885625, AA993567, AI028262, BF975457, AA808518, AW275811, AI086981, AA046802, BF478308, AV744983, AI869215, AA641617, AU157068, AI924628, BF594893, AW571905, AI146641, AI863164, AI214585, AI261778, AI492622, AW089250, BE207445, AA937376, AA830286, AA836878, W80372, AI023344, BE220743, AA418367, AI091921, AI885685, AA161459, AW134967, AA605225, AA725880, AW275980, AW248464, AA774650, AI991146, F09607, AA707150, AA593400, W17197, AA721238, AW073192, AA621167, AA908648, AI814647, R08844, AA290839, BE706675, AA100200, AA004650, AA285017, T65581, AA733113, AA405078, HI9750, H53457, AA765557, AW383354, AI923502, AW615521, N95096, H50501, H24958, BF924331, H52806,

					BF771262, H02315, N92953, BE695264, N73135, BE695255, BE243599, N89778, BE695242, AI420513, AV710714, BF311141, AW672892, BE244250, BE410858, BE390798, BE265269, BE018715, BE730637, BE392884, BE407259, BE408722, BE409678, BE796728, BE797085, BE279939, BG252804, AI990442, BE798385, BE877836, BG028222, W17255, H51332, AA101042, BE791799, BE259147, AA210904, AU129585, AA069873, H20075, BF025701, BE736857, BE890068, AA507302, H00417, BE799942, H19749, BE880605, BF676698, H46372, AI878952, AV709698, AI937600, BG026073, BE170116, AV749909, BE181361, W23659, BE181405, AA640620, T65652, AV727226, AA100199, H52769, AA046819, AA161408, AI743197, AI760050, BF663082, AL109658.5, AB049861.1, BC002801.1, AF283774.2, AK001511.1, AF112211.1, AK023585. 1. AC004928.2.
HTOHT18	586	628300	1 - 1485	15 - 1499	
HTOIY21	587	665745	1 - 1544	15 - 1558	
HTOIZ02	588	826312	1 - 535	15 - 549	
HTOJA73	589	797108	1 - 1280	15 - 1294	AI963720, AI284640, BF668217, AV728425, AL046409, AI334443, AF330238, AV725423, AV762395, AA610491, AV760777, AV761106, AW265385, AV762098, AI270117, BF241967, AV761362, AV710066, AW979060, AW500125, AF074677, AI431303, AL138265, AV763670, AV762064, BF725504, AI305766, AV729881, AW303196, BF697673, BF337291, AV757607, AW193265, BG249643, AV740801, AW301350, AV761843, AV762505, AV763449, AV761489, AL138455, AW419262, BE049095, AV763971, AW472872, AA581903, AL119691, AI307608, BG059568, AW274349, AA490183, AW965008, AL037683, AI357901, BG109996, AL041690, AA720702, AW963497, AL046205, AI613280, AV759204, AV760486, BF683672, AA665330, BF677892, AL044940, BF680074, AW502975, BG059450, AV762092, AW974109, BF827410, BF541120, AI350211, AW833862, AV764307, AV760466, AV764329, BE139146, BG104686, AA682912, AV763540, AV735370, AI345654, AV756693, AV762111, AW327868, AV760937, AV763354, BE672637, AI754336, AI281881, AI457397, AV733830, BF970654, AV703682, AI345681, AV760042, AI890348, BE276880, AV738303, BF679304, BE049139, AV759172, AI355206, AV762959, AV762645, AI610920, AA587604, AA680243, AA491814, AL042853, AI801482, AU147104, AW073470, AA877817, AV763633, AV702857, AW410400, AI345675, AV763255, AV760057, AW088846, AA521399, BG222267, AV762397, AW953071, AV759362, AW238278, AW858127, H71429, AV759274, AW513362, AI860020, AV760395, AW662543, AV761786, AW408717, AF063563, BF680041, AW028429, BF915722, AV764578, AV764530, AW960468, AV762535, BF915247, BF030810, BF991286, AV764241, AL045053, AI754658, AV732891, AW503666, AA521323, BF965406, BF475381, AW501386, AW072923, BF915628, BF965007, AV725431, F36273, AI133102, AL042420, AW872676, AW996768, AV758600, AI064864, AW956640, BF691714, AV763847, AA468022, AW406755, AW975987, AI345157, AV762009, AI732120, AW513015, AW576503, BF793766, AA857486, AA569471, BG036665, AI133164, AA126450, BE350475, AV691147, AW974932, AI061334, AV759518, AI754253, AW020340, AV728928, AI538852, BF681576, AI623720, AI289067, AA613203, AI307201, BG179731, BE439761,

					<p> AW276827, AW021583, AI619997, AW270382, AI696962, AW956641, AV761745, AU145393, AA584201, AI254615, AW969629, BG171096, AW957076, BE233771, AW500684, AV759382, AI561060, AW872575, AW268300, AW576391, AI341664, AW438643, AV764398, AV729809, AL121385, AI679782, AW518220, AI370074, AL046457, BF724767, AW504669, D83989.1, AL445248.7, AF015149.1, AL163279.2, AC011755.7, U18394.1, AL139039.17, AP001216.3, AC020917.4, AF015151.1, U57007.1, U18391.1, X55925.1, X55926.1, X54178.1, AL135839.15, AF015148.1, M37551.1, AC008887.5, AC011440.5, U57009.1, AL136179.15, AC073545.4, AC035149.3, X54181.1, U91322.1, AF015147.1, X54180.1, AE000658.1, U18395.1, AL136124.10, AC008525.7, AL513008.14, AC008848.7, AL35384.6, AC005082.3, AC018828.3, X76070.1, AP001037.1, U18392.1, AL161670.4, AF121781.1, Z85986.1, AF015156.1, AC005516.1, U02531.1, AL031904.1, AC009958.2, AC007043.3, AL359552.16, AL121890.34, AL355478.16, AC012492.9, AC009506.5, AL158832.13, X55927.1, AC021851.4, AP000842.4, AC011748.7, AC073135.3, AC006458.2, X54175.1, AC004848.1, AF015157.1, AF068862.1, AC007681.3, U18393.1, U57008.1, AC004612.1, AC006131.1, U18398.1, AL445242.3, AP001732.1, AL353748.13, AC034193.4, U02532.1, AC004965.2, AC008623.4, AC018808.4, AC006392.1, X53550.1, U67221.1, U18387.1, AC003081.1, AC005212.1, AL049696.9, AC008080.1, AC010422.7, U18399.1, AL035423.4, AC004139.1, AF243527.1, AP000567.2, AC016025.12, AL162831.5, X55931.1, AL132780.5, AL158830.17, AP001224.3, Z94721.1, AC040160.4, AC005531.1, AL109919.18, AC004057.1, AC020559.4, AL117348.25, AL391415.12, AC034198.6, AL135927.14, AC007227.3, AC008687.4, AF126531.1, AL138724.12, AL356244.12, AC005081.3, AC007365.3, AL031680.20, AL021026.1, AC010792.4, AP000087.1, AL031670.6, AC023423.5, AL354674.5, AC004948.2, X75335.1, AC016691.10, AC073542.4, AC006367.3, AC011005.7, AL513007.5, AL136171.17, AL109804.41, AF223391.1, X54179.1, AL035681.13, AC007437.16, AC005933.1, D87008.1, AL133396.2, AL353807.18, AC012476.8, AC022384.4, AC011455.6, AC079383.17, AC006130.1, AC015853.8, AC006262.1, AL121655.1, AL109759.4, AC008764.7, AC004854.2, AL049776.3, AC005004.3, X55922.1, AP001708.1, AC007005.3, AC010103.10, AL590611.7, AL590762.1, AC010616.5, AL023494.12, AC007216.2, AF049895.1, U67801.1, AC010428.6, D88268.1, AF015153.1, AC004485.1, X54177.1, AP001694.1, AC005701.1, AL122015.17, AC004797.1, Z97181.1, AF045448.1, AL162713.19, AB041731.1, AC084882.2, AL049709.18, AC008616.6, AC016080.5, AL121949.13, AL138836.15, AC004041.1, AC012377.5, AC006254.10, AL135940.11, AL138784.30, AC009086.5, AC003109.1, AC005052.2, AC005998.3, AP001724.1, AL359435.7, AF064864.1, AF077058.1, AL096862.18, AL450339.5, AC006543.7, AL121899.37, AC012150.16, AL121972.17, AC002067.1, AL353739.4, AL355074.5, AC022383.3, AC023425.20, AL354676.10, AP001342.1, AC009311.3, AC020604.9, AL021978.1, Z94044.1, AL160175.5, AC008817.7, AF285443.2, AC023512.28, AC005037.2, AL109865.36, AL159140.4, AF252830.3, AF002992.1, AC024561.4, AL354798.13, AL035072.16, AL023799.5, Z81308.2, AC009039.6, AL139110.17, Z98745.1, AC007066.4, Z22650.1, Z69719.1, AC074000.8, AC072052.6, AC005908.1, AL135844.9, AC007256.5, </p>
--	--	--	--	--	--

HTOJK60	590	545067	1 - 890	15 - 904	<p>AC027612.6, U95742.1, AL157938.22, AP002456.3, AC012351.3, AC007656.2, AL049757.14, AC006039.2, AC006207.5, AC005704.1, AP003438.2, AL135744. 4.</p> <p>AL079734, AI613389, AA129746, AI267356, AW970571, BE048991, AI267450, BF902572, AI133083, AI085242, H07953, AI253376, BG029528, AL038606, BF876179, AI207728, BF868994, AI049709, AA832016, BG222875, AA720774, AW089016, AW995665, BE084668, AA565911, BF821897, BG015615, BF529925, BE256101, AI357823, N30205, AI249447, AI537800, AA632839, AI440117, T74524, BE244243, AA501867, BE000614, BE154781, AA502207, AA084609, AA599080, AI679759, AV760019, AA191659, AA515351, BF678165, AW069412, AI284092, AW265359, AI056177, BE387304, AV757069, BF131490, BE049021, AW970987, AW276678, AW303098, AA584756, AW021627, AI628859, BE893315, AI251034, AA912287, BE501593, BE139139, AU117926, AC084864.2, AC078846.2, AC004815.2, U51560.1, AJ400877.1, AL445490.6, AC024082.6, AC007078.3, Z80896.2, AC012170.6, AJ009612.5, AC005940.3, AL357497.17, AC022415.5, AC008736.6, AL023879.1, AC004520.1, AL009031.1, AP003352.2, Z95116.1, AL356095.11, AL135927.14, AC007227.3, AC068533.7, AC005071.2, AP001710.1, AC003007.1, AL035420.15, AL353807.18, AC018695.6, AF168787.1, AL359494.17, AC012384.16, AC009311.3, AL117336.22, AC005736.1, AC008784.6, AB003151.1, AL024498.12, AC005519.3, AP000553.1, AL135928.6, AC011472.7, AL133373.5, AP000359.1, AC022201.4, AC004000.1, AF036405.1, AC019206.4, AC008403.6, AC008626.5, AB000882.1, AC005341.12, AC002430.1, U67810.1, AC004867.5, AL109804.41, AC007384.3, AC090939.1, U89335.1, AL049713.20, AL020997.1, AL049776.3, AC008962.8, AL022238.1, AC007216.2, AC006329.5, AC027129.5, AC083871.2, AC005907.1, AC004166.12, U95742.1, AL138725.19, AC002326.1, AL132777.4, AC055740.17, AL356915.19, AC011446.6, AC008397.7, AL365364.19, AC009412.6, AC001227.1, AP001748.1, AC011452.6, Z83844.5, AC002476.1, AC011475.6, AC003101.1, AL136295.3, AL157912.5, AC011464.5, AC011450.4, AL138889.9, AL022476.2, AL138965.10, AC004878.2, AL356785.18, U62631.1, AL035587.5, AL354932.26, AC024085.5, AP001714.1, AC006312.8, AC009145.4, X55926.1, AC020917.4, AC002544.1, AL139099.2, AC005500.2, AC073136.6, AC002543.1, AL121943.22, Z93015.9, AL138822.13, AC004990.1, AL354928.9, AL121901.20, AC004702.1, AL121601.13, AC011491.5, AP001412.2, AL049869.6, AL159191.4, L44140.1, AC017082.4, AL035407.15, AF001549.1, AC004821.3, AC004814.2, AC018506.4, AC009131.6, Z82244.1, AC022083.6, AL162584.9, AC006333.3, AC005005.1, AL355480.22, AL161626.20, AC006367.3, AC011455.6, AL096701.14, AL049653.7, AC005874.3, AF134471.1, AC001231.2, AL021154.1, U91326.1, AP000688.1, AP000692.1, AC009996.7, AL117258.4, AP000687.2, AC005332.1, AP001666.1, AP000151.1, AP000152.1, AP003357.2, AC006275.1, AP000252.1, AC044797.5, AC005015.2, AL031311.1, AC009004.6, AC023105.7, AP000208.1, AP000130.1, AC005291.1, AL121834.20, AF250324.1, AC011490.7, AL031295.1, AC008812.7, AL353716.18, AC067941.7, AP001630.1, AL121881.35, AC004812.1, AP000313.1, AC004686.1, AL031005.1, AP001724.1, AC074121.16, AC007318.4, AL139002.18, AP001432.1, AC026794.4, AC006285.11, AC002558.1, AP000521.1,</p>
---------	-----	--------	---------	----------	--

					AC007376.9, AC005632.2, AL138836.15, AC011484.4, AC009570.13, AP000247.1, AL391987.15, AL159997.14, AL031721.1, AC007842.1, AL133244.1, AC002563.1, AC005839.1, AC020931.5, AC016697.8, AC034240.4, AL031123.14, AP000212.1, AL136139.6, AC073897.6, AC007679.4, AC005821.1, AP002085.1, AC009079.4, AL451075.15, AC007283.3, AL033529.25, AC005098.2, AC005207.1, AL133284.13, AL390074.17, AL445184.11, AP000134.1, AC009331.5, AC084881.19, Z99716.4, AC008649.6, AF088219.1, AC006511.5, AC005871.3, AP001716.1, AC009510.9, AC007546.5, AL139415.10, AL021977.10, AC004824.3, AC022308.17, AC009229.5, AC011811.42, AP000103.1, AF196971.1, AP001728.1, AC010654.8, AC006138.1, AC005378.2, AL389889.11, AL532387, AL532388, AL520598, AL534919, AL536351, AL529149, BE740155, BG031799, BE269797, BF984158, AL529148, AL537418, BF315754, BE891262, BE298901, BE409619, BE261844, BE296298, BF691759, BF316798, BE387294, BF316385, BE865498, BE279596, BG116442, BG115631, BF725854, BG236132, AI924354, BF058328, BE315264, BE279832, AW960909, AW953297, AI921207, BG027736, BE391898, BF981073, AW089642, AW607100, AW083566, AA779231, BF950834, BF769481, AL536350, AI597662, W72124, AA757487, AI004378, AW474708, BF950841, AA779154, AW966051, AI815918, AA181149, BF214063, AW609985, AI719697, AA181148, NS2277, BE266550, BF514424, AA644552, AA315773, AV655765, AA657491, BE279156, BF997441, C05777, AA630867, AV647073, AA446396, BF512274, BF985404, BF894339, BE207304, AA768108, AI003424, NS9336, AI358817, AA302986, BF986382, AA575917, AW615772, AV477904, AW409761, BE870050, AI815721, AV710773, AA009415, AI362635, BE276831, BF750334, AA554868, AA088502, BF802327, AI648676, AI560267, Z40243, N32193, R37325, AW628445, AI831717, BF81083, BF813931, BG004621, AA563856, AA868751, AA088448, T69236, R12437, NS9026, Z44284, T58935, W77848, AA009696, R13448, AW241297, R37361, AI184854, T58875, BF872966, AA765983, AI383674, AA303060, N72929, AA296970, AV746892, R72050, BE934313, W38735, BF769484, AA027796, AA552128, AI423329, BE706063, BE074034, BE673575, AA323238, AA385759, AW610075, AW935206, AA365395, AA973951, AI474457, BE934455, AA350856, AA843692, BE926535, BG003907, AA302913, BF593049, T54203, BG003213, AW827234, AI961882, BF590312, BF531118, BG025715, BF341680, AA507090, AA873450, AI742493, BC000001.1, AF212229.1, AK027711.1.
HTPBW79	591	131783 5	1 - 1360	15 - 1374	
HTSEW17	592	460579	1 - 638	15 - 652	AA779073, AI860913, AI028060, AI024955, BE549714, AW136463, R07163, AW612172, BF773051, AF007146.1, AF381980.1.
HTTDB46	593	812763	1 - 3045	15 - 3059	BF333492, AK025267.1, AK025111.1, AB020625.1, AC016572.5, AC022413.4.
HTWCT03	594	429618	1 - 1949	15 - 1963	AA429504, BE709846, N57518, AA279467, H09648, R41904, AA007236, BF764791, AW810272, AU119787, BE790560, BF589035, BF437720, AW135490, U74496.1, Z95704.1, AL078621.19, AP001761.1, AP000218.1, AP000340.1, AC004908.1, AC002055.2, AF270552.1, AB019437.1, Z96386.1, AK021903.1, AF017466.1, AF328497.1, AF035187.1, AF035188.1, AF327134.1, AF229518.1, AF328523.1.
HTWDF76	595	714344	1 - 949	15 - 963	AL528049, AL043219, AW088366, AW152013, BE779803, BE672597, AW243555, AI818186,

					<p>AI653697, BE251084, AU160597, AU150608, AI871013, AA496891, AA428540, AA349190, AW249598, AI701503, AU151739, BE502287, T18883, AI202674, AU152190, AW732070, AI376266, AW139928, AI299710, AI888510, AI658535, AW341396, BF976767, BF224111, AA912087, AA694485, AI887614, HI7658, AA432221, T33286, AI571236, AI299136, R56443, R51367, BF447467, AI367595, AI420610, AI825055, T70333, AA928620, AI681192, AI499499, AI197972, AA664995, BE045622, AI961711, AI184815, AA88827, AA768736, AI659770, AA292170, AI383839, AI888009, R51842, AA973896, AW470342, AI915171, AI989713, BF802487, BE799943, AI275745, AI934660, Z39039, AA634437, AW137356, F04023, AI762348, AI253211, AI824874, AI136295.3, BC004159.1, AK001435.1, AF006264. 1.</p>
HTXAJ12	596	131081 4	1 - 661	15 - 675	<p>AA456896, BE783654, BG251027, AA768759, AI806785, AC083866.2, AC011005.7, V00584.1, K01562.1, AL035087.20, U84680. 1.</p>
HTXCV12	597	135221 3	1 - 1120	15 - 1134	<p>AI014551, AI379840, AA928131, AA463863, AA463337, AI360362, AI553741, AI933132, AA682260, AA437378, AW612124, BE939238, AC017099. 11.</p>
HTXDW56	598	695765	1 - 1569	15 - 1583	<p>BE891580, BE874295, BE272309, BE905589, AU123343, BE790068, BG171568, BF797209, BE746860, BG027340, BE866834, AI765620, BE394238, BF978180, AV691685, BF131943, AW993028, AA725071, BF701185, BF029881, BF724883, AW271710, BE855449, BG122640, AV692294, BE549980, AI916562, BE936367, BE936346, BF130329, BF244421, BF088035, AI634990, BF088014, BF088012, BF088026, BF449073, BG165351, BE936324, BF593983, AI654165, BF939873, AI991405, BF592056, BF088032, AU151546, BE936318, BF923670, BF088037, BG250837, BF088024, AW750352, AI983985, AW299864, BF088028, BE936364, AI670830, BF088019, AW750348, AI570128, BF197216, AW168930, AW009948, AA704525, AI749744, BE349529, AW000916, AA861614, AI955276, AI492455, AI676055, BE549294, AI276897, BF898194, BF880528, BE936352, BF102773, BF983492, AI681128, AI796805, AW275120, BE468207, AA430567, AI659635, AW419101, AA890343, AW167370, AI635116, BE221529, AI361022, AI700668, BE858834, AW614823, AI968287, AW276391, AW592400, AI935478, AI089414, AI955265, AI912091, BE857580, BF573804, AI718821, BE349946, AI935972, AI216100, AA699534, AA030011, BF971066, BF038581, AA587495, BF821491, AI025329, AI300305, BE304656, AI342565, BG012643, BF848195, BF923020, AI308169, N38817, AV695789, BF436974, BG171706, BF898192, AI298732, AA704532, AI628899, AI018477, BF572796, AA115429, AW752990, AI334626, AA774557, BE302369, AA045856, BF088010, AW752951, AI160398, AA628480, AA555219, AW752948, AA189132, AA780575, AI983713, AW752946, AI686341, BF923688, AW512904, AW752986, AI350088, BF108993, BE074717, AI917769, AI263986, BE868265, BF446418, AI131166, BE677404, AI207172, AI347097, AI094833, W31093, AA216738, AA922079, BF339506, BF062926, AI095199, BF928253, BF308118, BF240462, AA911845, BF880533, BF923693, AI356898, R24001, AI827291, AI251444, AI828631, BF689464, AA190469, AA774568, BF218904, N66175, AW827086, BF923018, AW897464, BF801661, W95063, BF365255, T51687, BF332864, R74559, H83131, AW341133, BE549357, AW471002, BE762765, BE891260, H83132, AI356017, BE740064, BG011025, BF247697,</p>

						BE762774, H44274, AW086147, BE762767, BF923679, N98698, AV684676, R51880, AW898923, AI431971, BE548022, AI203034, AA766045, AI823509, AW071576, AW295813, R62584, AA028993, BE018806, AA765554, AA017568, N49971, H48233, BG006485, AI277213, R79503, BF591992, H78111, R62585, R22076, AI206462, N54046, AI752881, AI220633, BF857686, AA580842, BF592158, H05682, H67771, AI949890, AI675025, AW602075, C21303, AW384997, AI583730, AA317754, AK001484.1, AF151803.1, AL049839.3, AL353678. 11.
HTXFL30	599	620001	1 - 1977	15 - 1991		BE891940, BF851322, W28069, AW298651, AA112484, T08083, BF955273.
HTXKF95	600	891275	1 - 961	15 - 975		AI934965, AW574868, BF056901, BE676636, AA831751, AA814605, AW590381, AI857985, AA742405, BF592924, AI697328, BF059191, AW450001, AI341301, AI635420, AW610280, AA917582, AI418901, C01813, BE694168, AW291415, AA775165, BF798709, BF916068, AW975618, AW966330, AV718489, AW964468, AV699866, C14331, AV718681, AV720791, AW966065, AV718931, AW966389, AV724520, AW949645, D80522, AV738340, AV699550, D80133, D59610, AW973541, AV718692, D81026, AW960465, AW975613, AW975605, D80248, AW965177, AW377671, C14429, AW964532, AV722801, D80251, AW949641, AV720731, AW973488, AW973445, D51060, D51799, AW959469, AV741191, AV718938, AV718633, AW949630, C14389, AW978634, AW966062, D51423, AV720203, D80366, AW959799, AV719324, AW966059, AW973490, D59859, AV701004, AW959582, D80166, AW973474, AW964756, AW966053, D59619, D80269, AW978661, D80210, AW960553, D80240, D80253, AV719822, AW973307, AW964477, AW956434, AW973447, AV699927, AW966369, AV718707, AV720211, AV720878, AV719557, D80241, AV699447, D50979, AW966029, AW958993, D81030, AV723927, AW959136, AW966075, AW949656, D59373, AW949642, D80188, AW959202, AV720035, AW973334, AW966531, AW966534, D80227, AW966333, D58283, AW966022, D80212, AW978648, AW960473, D50995, AW966013, D59467, D51022, D80022, AW966041, D80219, AV719188, D80195, AW975621, AW959628, AW966378, AW973485, AW965163, D80391, D80164, D59275, AW966030, AW966054, AW966050, AW965158, D80043, D59787, AW959062, AV718440, AV719783, AV720028, D59502, AW959597, AW959570, AV719468, AV718800, AW965185, AW965197, AW965196, AW965184, AW965175, AV718844, AV720464, AV718770, AW973330, AW973482, AW958992, AW964488, AW962082, AW949654, D57483, C15076, D59889, D59927, D80196, AV720151, AV720533, D80024, D80378, AW949657, AA305409, AW966386, AW960454, AW962395, AW966368, AV720616, AW966032, AW966331, AW966398, AW966397, AV701839, AW956397, AW949629, AW949653, AW949631, AW949643, AW949618, AW949655, AV720220, AW966399, AA305578, AA514188, AV744662, D80038, AW966385, AW966043, AV744012, AW960504, AW973473, D80193, AW966388, AW962245, AW966380, AW965176, AW964737, AW966400, AW966332, AW960532, AV741187, AV741198, AV721386, AW949646, AW949633, AW949632, AW949658, D80045, C14014, AV744004, AA514186, AV744690, AV702035, D80268, AW752082, AV700889, AW753053, AW177440, AW966023, AV742001, AV720812, AV723097, AW966377, AW975623, D80439, AV744006, D59627, AW360811, AW178893, AV718530, BC008360.1, AC008083.23, AC004242.1,

					AF058696.1, AB028859.1, X67155.2, AF271371.1, D34614.1, AB002449.1, D88547.1, D50010.1, U79457.1, AB038216. 1.
HTXKP61	601	824083	1 - 1195	15 - 1209	BE275577, BF342801, AL529204, AL660428, AW003481, AI469418, BG231875, AU160542, AW003722, BE221902, AL530582, AI697903, BE741000, AU144726, AA433918, AI371156, AA029908, BF516011, AI017052, AI150233, AA846607, AI095354, AU118071, AL042959, AI653247, AI338204, AA552385, AL528110, AI001078, AI168113, W31264, AL529205, AW449063, BF510837, AI061060, AI251838, AW770273, AA810494, AW383853, AI582444, AW440361, AI337406, F25991, AA040569, AA030037, BG258196, R52694, R60246, R61272, AI225083, BE562335, AI474379, AA813625, BE503451, AW957171, T33316, F08876, AI394687, BF797612, AA706515, AI372806, BE407233, AA938133, AI962262, AA694463, AA806149, BG256771, AA371703, AL523910, BE384815, BF087775, H56115, AI265837, BG151348, BF930219, H05238, BE397686, AW840116, H18625, AW166747, AW839962, AI832256, BF793735, R46092, F09405, AI570516, AI832533, AI264936, AI201947, AI916913, AA076196, AI206207, BF813476, F08877, AI468489, AI949645, AI273819, AA732023, AA743249, AI918304, AA425605, BE047789, BF084883, BF374860, BG119332, N91827, Z40907, BE560246, AW008923, AI085806, BF003088, T65375, BF765564, BG230772, AA214506, BF843766, BE907797, AA868644, BF914189, AI372805, AA034314, T47081, BF685922, AW383854, AI493557, AA670130, AL036905, BF724094, BF882198, AW750565, AW816798, AW175913, BE727732, AA215302, AA436121, AA040668, AI424583, AA434601, R88938, BC002855.1, BC008053.1, AL136657.1, AL137200.1, AK021605.1, AB037846.1, AF265228.1, AL035417.15, AC005043. 2.
HUDBZ89	602	135221 1	1 - 2121	15 - 2135	AU125474, BE883532, BG107414, BE988459, BE746984, BE542496, BF575571, AW958579, BF314540, BF573504, BE734208, AI802426, AW953779, AW292502, AU149129, BG031927, AA436628, AA076658, AU150986, BF081743, AA046746, BF095716, AA046670, BE186054, AW601449, AW673051, AW294732, AW601455, AI910194, BE092409, AI601235, H66950, H66951, R85537, AA363520, AI202299, R40736, AA363830, BF085875, AV749014, BE876022, AW190087, AL520949, AA808657, T98596, AW896216, T98595, AA355808, AW377204, AW377198, AA079565, AW377106, BE699057, AW377170, AW752839, AW362224, AI223245, BE832662, AW579894, AW579890, AI362898, AW377180, AB007866.2, AL109823. 23.
HUFBY15	603	135234 9	1 - 1179	15 - 1193	AW389141, AW609901, BF374842, BF374845, AW388854, AW389152, BF374846, AW389148, AW389140, AW388908, BF374844, AW752215, AI797737, AW662557, AW375776, AW389144, AI990471, AA625286, AW388954, AW271542, AW752222, BF032067, AI953121, BE504740, AW389077, AW388858, AA303053, AI991077, AA303052, AW388926, AA613119, AA297581, AI963985, AW388918, AW388731, AW388732, AW388759, AA524545, BF513041, AW811008, AL132639. 4.
HUFEF62	604	645101	1 - 504	15 - 518	BF929940, AU137259, BE065411, AU128307, AW818223, BE154234, BE065240, BE065404, AW856804, BE065281, BE065188, BF755156, AW939313, AW876637, BE065282, AW936927, BE065231, BE866484, BE065242, AU121120, AW992038, BF577152, BE612443, BE065370,

					<p> AV731147, BE161681, BE065317, AV732111, BF679479, BE065413, AW969925, AV730460, AW857254, BE065118, BF104734, BF759242, BE082759, AV709805, BF755153, AV730235, BF037518, AA977057, BF836355, AW876639, BF948215, AW996889, BF755154, AW935656, AW973139, AA528530, BF734987, AA191204, AL046030, AW855823, AU135945, AW501852, BF969464, AW863794, AW890245, BE139153, BE085108, AL119323, BE065280, AA601495, BE011046, AA493718, AL046784, BE011043, AI624655, BE011042, AW896115, AA761416, BE972565, AL120423, AW302839, BG010346, BF959938, R84363, BF960892, AA682353, AL042414, BF962824, AL041416, BF831226, T06958, AW993651, BF854999, BF956969, BF736812, BF962008, BF753245, BF772428, BF673759, BF916693, AW993753, BF883025, BF923362, AV730003, AI026925, BE157145, AV704579, T71060, R79525, BF893577, AA325164, BE064368, BE157315, AA205322, AA346163, AA457283, BF809496, BE011045, AA533484, AU137226, BF210705, BF895153, AL120163, AV732374, AW812457, BF751447, AI557245, AA554985, AV655163, AA321733, AV732067, BE206708, AV729982, BE044670, BF679337, AA113115, T06803, AA491346, AA219222, AW391396, BE011047, BF687597, BF964256, AA180025, AA577884, AW866346, BF930824, BE165031, AV731981, BE257366, AI298238, AW855161, AW937257, BE019645, T63711, BE007920, AL133996, BF920901, N20799, AA504676, AU135263, W03937, AA584718, AA996004, AW063432, BE074928, BE074925, BE074924, BE074927, BE074929, AA113109, AU122701, BE894098, AW818666, BE074926, D44828, BE074930, AA157151, AV730114, AA332197, AA181443, AA018677, AA601206, AA339620, AV732054, T57463, AW900157, N89024, AA322003, AW818530, AU137873, AV754121, AA457599, BE877368, AW892118, BF792872, AA745295, AA101399, AV730285, BF820471, BF753251, BF759243, AL139090.11, AL138680.15, AC020987.8, AC010146.13, AC005213.1, AF229557.1, AC019097.5, AC018676.5, AP001880.4, AC006399.6, AC009517.5, AC006313.1, AL132800.4, AP002364.3, AC011745.4, AL136090.12, AL021069.1, AL590084.9, AL360236.26, AC008471.6, AC010191.24, AC073655.26, AL353140.12, AC005188.1, AC069304.7, AP002534.1, AL512403.9, AP000532.1, AL132795.12, AC010395.6, AC012610.5, AL031054.1, AL031665.19, AL121939.12, AL132657.33, AC020941.5, AL355589.8, AC002429.1, AL390027.11, AL161443.13, AC002471.5, AC005374.5, AL035466.3, AL360219.18, AC020647.9, AC009404.5, AP000365.1, AC004385.1, AC005160.1, AL139115.5, AC007090.3, AC091491.1, AJ246003.1, AC079316.15, AC022416.5, AC002403.1, AP000548.1, AF194537.1, AC068139.5, AC016643.6, AC021269.4, AL512445.5, AP001883.5, AP001429.2, AL034351.1, AC024589.4, AC008162.3, AC004543.1, AL445209.4, AC005373.1, AC068722.6, Z85997.1, AC005823.1, AC067947.6, AL121947.14, AL121658.2, AC010632.6, AC068797.29, AL031585.1, Z95704.1, AB020874.1, AC005399.19, AP001978.4, AC011998.8, AL356100.8, AP001818.2, AL133330.8, AC002981.1, D83253.1, Z68871.1, AC004845.2, D87004.2, AC079468.3, AC022224.22, AF117829.1, AC012442.7, AL031393.1, AL135926.12, AC090945.1, AL360085.26, AL356801.5, Z84470.1, AC006350.2, AL391380.12, AP001860.2, AC008493.4, AC002432.1, AF190464.1, AC007380.3, AC004982.1, AC004550.3, AL109764.2, AC019212.4, AL158850.8, AC026167.4, AL590675.3, </p>
--	--	--	--	--	---

					AC010234.5, AL391416.9, AC005741.1, AL139812.11, AC011743.6, AC013290.4, AC010623.7, AC010679.6, AC023281.13, AC016968.24, Z94056.1, AC083861.2, AC055120.5, AC008463.6, AL034405.16, AC008664.5, AL158206.8, AL590043.7, AC007611.5, AL162373.16, AP001607.1, AC004864.1, AL096793.20, AC010499.5, AL139106.12, AC005993.2, Z97987.1, AJ006345.1, Z96074.4, AL035415.22, AC008430.3, AL512310.3, AC078843.2, AJ009615.3, AC002106.1, AL353753.6, AL049828.3, AP000797.5, AL096800.20, Z82205.1, AC021133.5, AL050309.4, AC004946.1, AC008782.6, AL049589.15, AL132673.17, AL117342.12, AL136970.8, AC018616.5, AC005603.1, AL359545.12, AC007402.3, AL079303.3, AL109941.17, AL109758.2, AC078851.4, AC007248.3, AL353764.9, AC008474.7, AP000547.1, AC008805.7, AL391065.6, AL136525.17, AP003471.2, AC016956.19, AC058784.17, AC069227.24, AL157775.15, AC020943.5, AC005740.1, AL031768.9, AP003467.2, AC078814.22, AL109845.8, AC006374.2, AC004885.2, AC025442.5, AC010528.8, AC005799.1, AF036235.1, AC025040.7, AC010368.4, AC005532.1, AL117351.12, AL080275.20, AC023480.6, AP002088.2, AC009318.11, AC076972.16, AC010145.9, AL133334.16, AC006357.5, AL163541.13, AL353691.12, AL160267.17, AL078638.9, AC007001.2, AL109761.3, AC009046.4, AC010651.7, AC003064.2, AC026161.4, AC003687.1, AF196972.1, AC006131.1, AL158093.8, AL162500.15, AL162719.18, AL355530.6, AC002416.1, AL034399.6, AC022367.34, AL031985.10, AC008243.6, AL158153.10, AL357045.10, AL079305.3, AC016651.6, AL162579.16, AC018503.6, AC004748.1, AL121927.24, AP000314.1, AC008716.6, AL109621.5, AL158147.17, AC007444.1, AL161916.8, AL008713.1, AL137017.9, AL390802.2, AL391420.16, AC005604.1, AC006061.1.
HUKAH51	605	135242 4	1 - 839	15 - 853	AA502331, AA503839, AW592433, AW444616, AW957011, AA568450, AI017393, T85589, T72043, T78178, AW079940, T85588, AI693382, AA299977, BF593574, T86494, AW605240, AW956056, AA335186, AA551860.
HUKBT29	606	694590	1 - 1743	15 - 1757	AI889172, AI080136, AA211445, AA211523, F24617, AA211502, F27978, AW614056, AI862904, BG222837, F28119, F30666, F29048, AI972919, AA211549, AI128717, Z24989, AW302460, F28086, F26294, Z28706, AA413432, R45814, BG014944.
HUSIG64	607	566762	1 - 996	15 - 1010	AUI32783, AUI35545, BE879986, BE875866, BE875592, AUI38137, AI343496, BE889561, BE179171, BF437308, AI627188, AW514639, AUI28177, AUI28176, AI287966, AA862577, AUI23709, AI674555, AUI38293, AA917000, AI811236, W52793, BF790472, AV746689, R52090, AW241400, AA948155, AW964602, AI762045, AI971433, Z40332, R49159, AUI36203, R81617, BG024648, BE843297, AA969855, BE816922, BE769518, BE816921, BE816943, BE816951, AUI38770, T30870, BF329070, BE835821, BF671946, AUI38360, AUI35153, BE179399, BF982177, BE769579, BE816923, Z44401, Z24991, AW379766, R81358, BE819508, AW946464, AA383566, AW956753, AW946480, D86326.1, AK002093.1.
HUSXS50	608	135236 7	1 - 2547	15 - 2561	BF683736, BE730782, BF792931, BF446001, BF205853, BE734189, BE796114, BG252706, BE560701, BE560444, BE562462, BE869307, BF309461, BE397034, BE560928, BE560121, BF691174, BF204949, BF312317, BE387292, BE856236, BG122978, BE298856, BE792425,

					BF797657, BE869619, BE616370, BE616612, BF306220, BF306195, AV655974, AW978168, BF305460, BG120823, BE560047, AW978171, BE882111, BF037530, BE676498, BE251660, BE270241, BF203303, BE902628, BF309616, BE267578, BG033765, AA485950, BE065146, BG254407, BF310813, BE312978, BF306475, BE905968, BF446006, BE737387, AW984420, N22768, AA176598, AW984416, BF125825, AW984417, BF307029, H95262, AW984415, BF435055, BF979227, BE693917, BE732765, AW984418, AW984423, BF306361, AV753202, AV690488, AA176958, AW984338, AI751645, AI301138, AA315010, AI830086, AW984422, AA176601, BG057361, BE390359, BE314347, BF307951, BG120049, T66123, BF030495, BE348975, BE675980, BE905732, BE538385, R61430, AA176961, AW337133, AW189210, AI264229, BF727126, BF573743, BF979483, AA779980, AW984421, AI142549, BF305130, BE931839, BE297623, BF941393, AA451629, BE044637, AW984413, BF308011, AW192745, AW027544, W37275, AA827128, BG115366, AI151013, AA034495, AA604131, AV650977, AI127612, AW150320, AI524711, AW973257, AI861987, AI469431, AW090258, AI985865, AI129520, AI129524, H37844, AA063465, AA151284, AW513431, H99312, AW984346, AI312744, BF819503, AA781668, AA026636, AI093350, AI089601, N25147, BG235957, AA191371, H72514, AA115146, BE298404, AA309734, AV749302, AA127064, AA709104, AA779590, BE901613, AW075416, W94571, BF375767, AA429862, H96717, AI458596, AI751646, AA828465, W65488, AI144280, N70034, AA630583, BF379967, W94665, AI990143, AW074204, N54139, AI360050, AI139072, AI298031, N31021, BE246664, AA151285, AA113370, AI673233, AA279340, N55099, AA341830, AW984344, AA620847, BF928260, AI289617, AW074213, AW364601, N58667, AA777063, AA489561, AW887094, N95463, R81022, BG055405, AA766203, AI038290, AA025249, T58352, AW189287, AW028461, AI633400, AW984345, AI147792, AI299766, BF799616, H75310, AI200071, BE561076, BG249896, AI499250, AA354776, W65499, AA809914, AI903841, AI453808, T71499, H10629, H58855, AI094411, R87151, AW089182, W96032, H81218, H81223, AV726304, R95799, AI370222, AA548305, R66175, AA814999, W80425, H94290, AA216453, BF798979, AA927662, H81224, W25203, H66405, BF092277, W02774, N48499, BE278547, N40461, AA846361, H19408, AA602474, AV738327, R89366, BF448937, BC008361.1, AL050254.1, AF233225.1, AF129537.1, Z71183.2, AL021937.1, AL035068. 3.
HVARW53	609	119481 2	1 - 1001	15 - 1015	AI991013, AW600302, BE045875.
HWAAD63	610	838626	1 - 3294	15 - 3308	BG058664, AW953071, BF668217, AL046409, AI284640, AW406162, BF852604, AU123691, AL046205, AW303196, D82290, AW301350, AI334443, AV761286, AL121235, AW274349, AW600804, BF339640, BF677892, AV763892, BG032943, AI572924, AI801482, AI431303, AL044940, AV740801, AV764490, BG249643, AV762098, AI270117, AW969629, AI732378, AW265385, AI963720, AI708009, AI350211, AU147104, AW473163, AA669840, AV735495, AI149478, AV763971, AA581903, AV759518, AV760937, AI754955, AL041690, AI583283, AV710066, AV763550, BG236735, AU145314, AW502975, AV742057, BG167743, BF940837,

					<p> AW193265, AV760777, BF914859, BF918590, AF074667, AV763122, BF918640, BE908796, BG036337, AW513362, AA491814, AV759362, BF725315, AV762050, AV763354, AW021583, BF919090, AI203955, AA531580, AA613232, AA490183, D82542, AW576391, AI623720, AV739452, AV728425, BE350475, AW500125, AA521323, AA665330, AV702857, AV730391, BF347791, AA610491, T40452, AA584167, AW474160, AI613280, AV762139, BE253048, AI192631, AI732865, AW020992, AA938105, AV733830, AF074677, AV652936, AW276817, BE872393, AW088846, AW438643, AI434695, AI345654, AW270270, AI610159, AW274346, AW265170, BF680041, BF854876, AA469451, AI589230, AA584145, AW833862, BE047069, AI570261, BF347740, AI619997, AW264934, AL042420, BF475381, AW518220, BF942454, AV762009, AI708125, BF697673, AW148792, BE297262, AW731867, AV759505, AA457542, BF991286, BF806176, AV728410, AU159337, AW089322, BE164494, AA774222, AI345518, AW963497, AV763255, AI696962, AL041706, F36273, AA496508, AV764228, AA478355, AV713243, AV761613, BE677379, BF736198, BF916517, AW079135, AV735370, R99597, AA652764, AW029038, AV725423, AA410828, AW169517, BG250302, AV761786, BE393367, BF872630, AF063563, AV764241, AA601294, BF827410, BF812839, AL119691, AV760378, AA177061, BG177715, BF674620, AI298710, AW169151, AA502104, AI345681, AI345675, AA633798, AV761925, AA682912, BF965007, AV733710, BF680074, AV762768, AA579362, BE139146, BF217299, AV762111, AV764578, AL118559.6, AB038653.1, AC020904.6, AC009497.3, AC006581.16, AF001549.1, AC004638.1, AC008267.6, AL121601.13, AL109865.36, AL356915.19, AC018809.4, AL163973.1, AC023908.6, AC011465.4, AL160237.4, AP000459.3, AC005081.3, AC044797.5, AC009154.5, AP001760.1, AL035367.5, AC007298.17, AL139350.17, AC006329.5, AC004019.20, AC006038.2, AC011455.6, AC008616.6, AL354932.26, AC011461.4, AL161892.9, AC005911.6, AC008265.15, U80017.1, AP003357.2, U91323.1, AC018636.4, AC005562.1, AL096701.14, AL080243.21, AC011450.4, AL133367.4, AL162458.10, AL354720.14, AC020658.6, AL158830.17, AL050318.13, AC005839.1, AP001687.1, AC009144.5, AC005041.2, Z99495.1, AC002565.1, AC022007.3, AC018769.2, AP000031.1, AC008372.6, AC011811.42, AC008688.7, AC009298.3, AP000047.1, AL445222.9, AL163248.2, AL139113.21, AC006435.7, AL136219.17, AC011495.6, AC008562.4, AC022308.17, AC008537.5, AP001667.1, AL133399.1, AL353135.32, AL121809.6, AC005696.1, AC073838.6, AC002476.1, AC006028.3, AP000115.1, AL445928.8, Z69666.1, AC005522.2, AC084783.2, AL133485.3, AC016025.12, AC004906.3, AC008649.6, AP000553.1, AC009470.4, AL031054.1, AC007193.1, AP000338.2, AL117334.29, AC009530.5, AP001346.1, AL034380.26, AC016830.5, AC008403.6, AL049550.5, AC027644.9, AC011930.5, AL109965.34, AC006241.1, AL049869.6, Z83844.5, Z98941.1, AL031283.26, AL159191.4, AP000216.1, AC009996.7, AC015842.9, AL136295.3, AL139330.17, AC008745.6, AC005527.3, AC007731.14, U47924.1, AC012377.5, AC025212.5, AC005500.2, AC018751.30, Z93241.11, AL078638.9, AL354993.24, AC016769.10, AC005324.1, AL355517.12, AC074121.16, AC012170.6, AC006538.1, AP000962.2, AC004650.1, AC083884.6, AL354935.23, U52111.2, AC016027.15, AC079363.19, AP000113.1, </p>
--	--	--	--	--	--

					AP000045.1, AL136123.19, AC007011.1, AL357150.7, AC008753.8, AL121675.36, AC002551.1, AL157838.24, AC009516.19, AC004865.1, AL139230.25, AC005529.7, AL050335.32, AC007216.2, AL049759.10, AP001716.1, AL021546.1, AC000360.35, AP001718.1, AE006639.1, AC025436.2, AL359091.10, AC004940.1, AC008101.15, AC003029.2, AL352978.6, AC020983.7, AL118520.26, AC007272.3, AC005154.1, AC078878.20, AL136980.5, AC005778.1, AC004971.3, AL033383.26, AC005921.3, AL159995.8, AC008068.4, AL008718.23, U95742.1, AC068712.6, AL024474.1, AC005031.1, AC017091.8, AC090514.1, AP001666.1, AL158040.13, AL161799.19, AL133387.8, AC003108.1, AC005808.1, AL109825.23, AC004033.3, Z98051.6, AC005295.1, AL353764.9, AC011236.8, AL132768.15, AC006285.11, Z99716.4, AL139396.17, AL096840.25, AL022098.1, AC005052.2, AC002300.1, AC007066.4, AL109797.18, AC004686.1, AL031662.26, AC008812.7, AL161656.20, AL136961.19, AC007404.4, AC020550.4, AJ003147.1, AP001858.4, AC021203.5, AC011559.3, AL117258.4, AC007620.30, AC010553.6, AP002028.1, AL356575.8, AP000299.1, AL121748.6, AL136300.22, AC016257.22, AC003684.1, AC004941.2, AL157406.19, AL049694.9, AL162853.17, U66059.1, AC026464.6, AL121972.17, AC013264.4, AL162426.20, AC006345.4, AC090960.1, AL049742.7, AC005037.2, AP000359.1, AC007051.3, AC018633.2, AL133174.15, AC008474.7, AC018635.6, AB023049.1, AC034198.6, AC022211. 5.
HWABA81	611	580889	I - 852	15 - 866	BE676856, AL121897. 32.
HWABY10	612	768334	I - 2936	15 - 2950	BG110964, BF795642, BF338736, BF344299, BF339610, BF344724, BE905985, BG171717, BF663359, BE878057, BF344117, BF797494, BE779728, BG110428, BE548198, BG113392, BE514891, BG105728, BF344895, BF342409, BE731592, BF344700, BF326253, BG107408, BF337274, AA029404, BE873119, BF339289, BE537561, BE546615, BF215522, BF348090, BF341943, BF974666, BG106809, AW517110, BE866817, BF337936, BE312135, BF342571, BF339613, BF795397, BE259965, BG025377, AW328067, AW051360, BF112053, AW467352, AW328066, BF305147, BF432273, BF925893, AW517104, AI921698, AI683501, BF338943, BE910326, AW732485, BF338023, BE465948, W38916, AA779337, BF854480, BE045837, W25986, AA973853, AA101157, AW084136, AA181835, AA775283, AA186569, W68073, AI560223, AI147239, AI089340, AI095449, BE670405, AA082143, AI066562, AA679092, AI422300, AI613463, AA588711, BG176783, AI761003, AI088731, AW051882, AI126290, BE646503, AA837279, AW087365, AI148227, AA009501, AI283584, AI434557, W28104, T62574, AI951073, AA782618, AI479881, W47512, N46795, AI985937, N40931, AI039397, AI432803, AI583386, BF802889, BF832903, BF804217, AW956881, W46793, BF802896, W68195, BG230721, BF815862, BG222416, BG222489, AI083847, BF806737, N40938, AI684916, AW576132, BF805055, W45117, W27429, AA324201, BF876216, AA862278, AI627377, Z43491, W26072, BF871297, W46921, AW518033, BG055999, AA071418, BF339697, BF432684, BF664265, H87824, BF804896, AI369040, N46788, AI280551, AW393985, BF343179, AI961956, R54302, AW393954, AA021161, W25922, AA574349, BF819220, BF933082, T08587, AI954952, T03895, AA910718, BF832997, BF833048, R60251, AI272774, AI682434, AW351625, AI369469, BF432394, W47511, AA366238, AA021160, AW394010,

						<p>BF814966, BF089042, BF155712, AA379745, AA877680, BF834816, BF359736, BF155722, AI373184, BF833953, N79680, AI370695, AI633094, AI244521, AW367090, BF832989, AI564952, T60257, Z39561, BF832028, BF964430, AA071417, BF831958, AI475015, AA843970, BF834819, BF831774, BF832084, BF128611, BF838597, AW243364, BF832026, R51913, AW973898, BF834823, AA381066, BE868310, AA077947, BF832092, F34684, AA318041, F03657, T63198, BF834818, N62740, AW407707, AI905924, AA844604, AA594549, BF834825, AA036914, BF749722, AI962077, T03318, T30346, AW902956, BE874414, T61397, AI915039, AI097627, BF831259, BE829374, BF832901, BF941457, H87774, BF094249, AW243479, BE563198, AW003146, BF752515, AW589814, BE815641, AW518327, BE714416, AA782804, BF831773, BF155715, AA026160, AA628683, AL136610.1, AK000539.1, AC073347.3, AC073237.3, AL162008.1, AF126488.1, BC008784.1, AL359932.1, BC004905.1, AL157480.1, BC006480.1, BC008282.1, AK026541.1, BC004119.1, BC008488.1, AL122049.1, AF218031.1.</p>
HWADJ89	613	799506	1 - 1755	15 - 1769		<p>AW958273, AW377130, AW574767, AW138853, BF111962, AA135712, AA156931, AW264402, AW117200, AI684896, AW339989, AA524553, AI394626, AI754796, AI860485, AI989549, AW129957, AI672796, BG056354, AA040909, AI000898, AI421190, AI693729, AW512733, AW044450, AI090274, AW205364, AW081734, BE939287, N35410, AA788655, N55117, AA844145, AI091868, N62863, AW302517, AI361489, AI628038, AA765992, AI800010, AI817849, BF800164, AI285397, AW403436, AA658416, AA648845, F13408, N73777, AA983941, R34886, AI024148, T04873, AA310563, Z33435, R72500, AI219780, AI149773, BG248348, R49268, BE305119, BE293618, AI743430, AW440724, T78828, BE249965, F10993, BE250024, AI371489, BE171979, N77769, AW235832, AI204426, R34492, N48042, BF899137, BF842700, R34372, Z38685, N99398, AI857456, AW841803, BE176205, AW899803, AA665233, AI290874, AW591407, AI432644, BF757092, AI623302, AW968355, AI431347, AI432653, AW081103, AI431230, AI431328, AI432654, AI432655, AI431310, AI431312, AI432650, AI432677, AW968356, BE672759, AI431353, AW971740, AW972091, AW972093, AW968729, AI431307, AI431316, AI432661, AI431354, AI431315, AI431337, AI431257, AI492519, BE672745, BE672732, AI791349, AI432666, AI432675, AW128900, BE672748, AI431238, AI492520, BE672719, AI432651, AI432647, AI431330, AI432674, AI432672, BF448552, AW972092, BE672767, AI431243, AI431248, AI432665, AI432657, AI432658, AI432649, BE672644, AI431255, BE672774, BE672742, AW969229, AI431254, BF589777, AI431350, AI431231, AI432662, AI431345, BE672738, AI431357, AW858522, AI431241, AI431351, AI431323, AI431346, AI431247, AI431318, AI432676, AI432673, AI431235, AI431321, AI431321, AI431321, AI432643, BE672792, AW128846, AI432664, AI431246, AW972090, AI432645, AW128884, BE672743, AI492510, BE672640, AL042931, AI431314, AW129223, AI431308, BE672749, BE672744, AI492509, BE672622, AI431751, BE672627, AL042729, AL045494, AL042655, BE672626, AL042523, AL042519, AL042853, AL031296.1, AK026719.1, AB007922.2, AF052104.1, AF064854.1, AL133082.1.</p>
HWBAO62	614	838164	1 - 1889	15 - 1903		AI683471, AI792952.

HWBAR88	615	836469	1 - 1037	15 - 1051	AV704722, BF890753, BE832379, AA334103, BF513764, AI654920, AW418882, BE503701, AI949038, AI093540, AA703125, AI076049, AI356640, AI359681, AI160128, BE858525, AV717117, AI422536, AB020316.1, AL357992.14, AL590485.7, AL359252. 17.
HWBCB89	616	109334 7	1 - 1303	15 - 1317	BE383506, AW957082, BF965615, AA749209, BE314194, BE856755, AW959644, AA406605, BF673639, AI635816, AI332841, AW576111, AI925364, AA599283, BE646653, AA815259, AI093865, AA557291, AA992639, AI199140, AI094047, AA778372, AA777994, BF110030, AA700564, AW236389, AW405247, AI376136, AW195935, AA418750, AA418959, AA809375, AI378198, W47086, AA258421, AA833614, AA722806, AW135756, AI312116, N26019, AI401448, BE047114, AI004747, N36650, AA297567, AA975019, AA369324, F32728, AW592186, AA298693, AA248246, AA214511, AA298744, AA248186, R01364, AA651996, AI382499, AA215364, AW241153, AW167882, AI038732, AL514627, AL514919, AV681857, AL513907, AA421957, AV756703, AL514473, AL513597, AL514791, AV682351, AI567360, AL135661, AI679916, AV756477, AL513803, AW087445, AV726951, BF904180, AL514691, BF792469, AV682330, BF726603, AV710479, AV706777, AV682266, BE965432, BE966388, AV758179, BG105099, BG257535, BE879906, AI499381, AW162071, AV717725, BG179993, BG112879, BF681080, BE964614, AI349772, AV682222, AL514155, AV757598, AI120854, BG036846, BF969484, BF971016, AV755207, AA640779, AV729334, AI633419, AI282903, AW301409, AI569616, AI433976, BF925729, AV682249, AV755581, BE963035, BG110517, BG109270, BG120816, BF343241, AI537677, BF970449, AW827289, BF883916, AL514935, BF724691, BE965481, BG122481, AL079963, AW103371, BG110684, AL513763, AI799199, AL036802, BF812933, AI868831, AV723953, BE048071, AI857296, BF904258, BF882343, BF795712, AV721967, AI678357, AL119863, AI521012, BF055737, BE964812, BG260037, AI498579, AV756560, AL045500, AW071349, BG105078, AW088899, BF344652, BF054789, BE964700, BG168696, AL048871, AI696626, AW068845, AI612913, AI572418, AI783792, AW238730, N80094, AI802240, BG180996, BG256950, AV757455, AL040243, AV681668, AI610645, AW983783, AI250663, BE876038, AI538085, AI620287, BF970162, AI702433, AL119791, AL045903, AI567351, AI280661, BE621256, AI537617, BF342070, AV682792, AI872914, BF034349, BG027082, BG108324, AA572758, AL036146, AV733824, AV681987, AV757096, AV758806, AI538716, AV755613, BF694790, AW268253, AI591316, BF726160, AI636456, AV682326, BF981774, AL121328, AI312428, AI281779, AI584140, BF673434, BG031815, AI950664, AV729890, AI680498, AV686346, AI682743, AW071417, BF792961, AI349004, BE881155, AV714975, BE966443, AI648663, AW148320, AI340582, BG250190, AI500077, AI349645, AV682051, AW149236, AI224992, AI289937, AI906328, AV716613, AV699193, AI564719, AI922676, BF343172, AW074993, AI349614, BG032208, BE781369, BE172767, BF793644, AK027683.1, AF091092.1, AL133640.1, S78214.1, AK025339.1, AF078844.1, AK000137.1, AB060908.1, AB049758.1, BC008387.1, AF090943.1, AF090934.1, AB063008.1, AF177336.1, AL512718.1, AF125949.1, AL512733.1, AL050393.1, AF090901.1, AL157431.1, AL133016.1, AL133606.1, AF104032.1, AF090900.1, AK000614.1, AL049938.1,

					<p>BC007021.1, AL136586.1, AK024538.1, AL359596.1, AK025958.1, AK026741.1, AL050146.1, BC008485.1, AK027164.1, AL122093.1, BC003687.1, AL137550.1, AL049382.1, BC008365.1, AK000652.1, BC003683.1, BC008488.1, AB056420.1, AL389978.1, AB055303.1, AL136799.1, BC008417.1, AK026504.1, AF218014.1, AK000212.1, AL390167.1, AL117457.1, AF111847.1, AL080060.1, AB048953.1, AK026045.1, AB047801.1, AL442082.1, AL137527.1, AL136749.1, AK000432.1, AL122098.1, AL442072.1, AB063070.1, AF207829.1, AF090903.1, AK026452.1, AL050116.1, AB055361.1, AL110196.1, AL096744.1, AB063046.1, AL136845.1, AL136928.1, AF097996.1, AL122050.1, AJ242859.1, AK026593.1, AK026592.1, AL136787.1, AL049452.1, AL133565.1, AK025084.1, AB019565.1, AF090896.1, AL512719.1, AB055366.1, AK026532.1, AL110221.1, AL136789.1, AL050149.1, AL136892.1, BC007199.1, AL137459.1, AL117585.1, AB056809.1, AB060887.1, AL050108.1, AL117435.1, AF106862.1, AK027868.1, Y16645.1, AK026608.1, Z82022.1, AK026534.1, AK026865.1, AF146568.1, AK026855.1, BC006195.1, AB047615.1, AL117460.1, AL359618.1, AF225424.1, BC008280.1, AK025524.1, AK026542.1, AF056191.1, AL136786.1, BC004951.1, AK026947.1, AB055368.1, AK025772.1, AL133093.1, AL353940.1, AL122110.1, AL359941.1, X72889.1, AB060912.1, AB048964.1, AB056421.1, AK026528.1, AK027113.1, AL162083.1, BC006807.1, AL136844.1, AL133075.1, AK000718.1, AB056768.1, U42766.1, BC001967.1, AL512754.1, AB060883.1, AB060863.1, AK025092.1, AF183393.1, AL512746.1, AL359601.1, AL389982.1, AL050277.1, AB060916.1, AL162006.1, AL133557.1, AL133560.1, AK025484.1, AL080137.1, AL122121.1, BC008070.1, AK026086.1, AL133080.1, AK026583.1, AL359583.1, AL136768.1, AK025414.1, AK000323.1, AB055315.1, AK000647.1, BC004370.1, AL157482.1, AL049466.1, AB052191.1, BC008382.1, AL122123.1, BC002839.1, AL137271.1, BC001045.1, AB052200.1, AK024524.1, AB047904.1, AK025967.1, AK000445.1, BC002733.1, AL117583.1, AL137538.1, AL080124.1, AK027096.1, AL512684.1, AB051158.1, AB062938.1, AB060825.1, AL136843.1, AK025632.1, AK026647.1, AL137557.1, AL049314.1, AK027204.1, AL512761.1, AK026630.1, AL050138.1, AK026533.1, X82434.1, AL049464.1, AB050510.1, AK026784.1, AK000083.1, AF260566.1, AK000618.1, AF091084.1, AK027116.1, AB060826.1, AK026744.1, AF125948.1, AB048954.1, AB060852.1, AL080127.1, AK026927.1, AL137463.1, AL583915.1, BC004556.1, AL133113.1, AK026353.1, AK025491.1, AB063084.1, AL512689.1, AF219137.1, AL359615.1, AL110225.1, AL117394.1, BC008899.1, AL137283.1, AK026959.1, AK025391.1, AB055374.1, BC007198.1, X65873.1, U91329.1, AL050024.1, AL049430.1, BC008983.1, AL162062.1, U80742.1, AK026526.1, BC009033.1, BC004958.1, AK026629.1, AK024588.1, AL049300.1, X98834.1, BC006164.1, AK000753.1.</p> <p>AW935696, BF358707, BF358705, BF347791, BF674056, BE394054, BF945587, AA503600, BF347740, BF915002, AA169263, BF030530, AA580808, AA630672, AA127426, F12561, AV762741, AA828749, F34498, AV760634, BE005691, AA362349, BE790132, AA584876, AA838190, AI801482, BF149427, AI708009, BG059568, D52587, AA316905, M86120, AL121870.9, AL031255.1, AL135838.5, AC009533.9, AC002565.1, AE006462.1, Y18000.1, AC011895.4, AF312032.1,</p>
HWBCP79	617	846382	1 - 1124	15 - 1138	

	618	135226	1 - 1827	15 - 1841	AC005529.7, AC006432.15, AC002094.1, AC005523.1, AP000350.1, AC007242.3, AC005087.2, AL163195.5, AC004882.2, AC018809.4, Z99716.4, Z83844.5, AL357075.17, AP000009.2, AP000150.1, AC006241.1, AC006251.3, AC007193.1, AC020893.5, U78027.1, AL031281.6, X76666.1, AL356983.33, AC005859.1, AC007272.3, AC007488.15, AC009570.13, AC007686.5, AL020997.1, AL499604.9, AP001965.2, AC005772.1, AL133153.3, AC005972.1, AC018637.3, AC021188.6, AC079177.21, AL445483.13, AL160414.18, AC008481.7, AC006597.2, AL136300.22, AC008753.8, AC010654.8, AC013726.7, AC007226.3, AL049870.3, AL157823.9, AC068724.7, U67825.1, AF111169.2, AC007318.4, AC004531.1, D26141.1, AC010489.4, AC007541.9, AL133405.17, Z98744.1, AP000111.1, AP000043.1, AL390074.17, AC010271.6, AC003690.1, AF241728.1, AL133418.4, AP001870.2, AC078878.20, AC004638.1, AL590762.1, AC005592.1, AL139809.16, AL136132.15, Z93023.1, AL009181.1, Z86090.10, AC005952.1, AC004953.1, AC005081.3, AC009086.5, AP001716.1, U47924.1, AC010422.7, AF283321.1, Z96074.4, AL117350.12, Z97192.2, AC020916.7, AC018821.4, AC011475.6, AL034451.26, U95090.1, AL590763.1, AC006120.1, AL356057.12, AC010126.3, AF114156.1, AL162390.9, AP003534.1, AL133243.1, AL162729.8, AL139054.1, AC003035.1, AB047869.1, AC005846.1, AL158052.10, AC009032.7, AC002455.1, Z83820.1, AC008891.7, AL163760.4, Z82182.2, AC007536.9, AC010519.6, AL138756.23, AC009475.4, AC005703.2, AC009779.18, AL358434.16, AL161629.10, AL391241.21, AC022212.4, AC008863. 7.
HWBDP28	618	135226 5	1 - 1827	15 - 1841	BE889490, AV722484, BF939302, BF925193, BF675397, BF925185, AI885403, BF894252, BF437150, BF511298, BF925900, AI970784, AI669189, AW402243, AI635202, AI669779, AI241438, AW571832, AI473658, AW291412, BF925180, AA374925, AI612948, BF925863, BE885616, AK026147.1, M73469. 1.
HWBFE57	619	907063	1 - 1119	15 - 1133	BF893888, BE247495, BF756575, AF328787.1, AF250238.1, AF140342. 1.
HWDAC39	620	131081 7	1 - 739	15 - 753	AI685116, AW827247, AA446110, AL038713, AW838167, AI627336, AI377100, AI635355, AV652234, AW962432, AI610326, BE158597, BF949364, BF764903, AW102963, BF438919, BE973780, AI186380, AI220812, AI193408, AI873822, AV740374, AI598077, AI382347, BE873986, AI572522, AI926394, AI092624, AV744706, AI245554, AI053905, AI559986, BE048806, AI805962, BF092872, AW090566, AI758697, AL157902.6, AC007390.3, AC017082.4, AC013604.9, AC083875.1, AC002385.1, AL157938.22, AC005209.1, AL135938.9, AC017006.4, AC006198.1, AL031736.16, AL133370.4, AL390057.12, AC078958.30, AC009405.3, AL359292.12, AL136164.8, AL158192.15, AL138703.10, AC004848.1, AC007877.3, AC010590.7, AC008739.5, AL445433.14, AL353707.14, AL158015.9, AL079304.3, AL121857.5, AC025436.2, AC011361.4, AC020915.6, AL354736.10, AC021188.6, Z82216.1, AC016398.5, AL391811.7, AL162853.17, AL356019.5, AC008059.2, AL392087.7, AC061958.11, AL121841.5, AL591291.1, AC016720.9, AC016770.10, AC027239.5, AL365227.19, AC012003.9, AL139090.11, AC007482.7, AL034561.5, AL355305.9, AC025445.4, AL161665.5, AL109852.13, AL078614.2, AL390838.26, AL160273.9, AL356115.9, AL391379.12, Z98749.11, Z93018.1, AP002534.1, AL161417.17, AJ271735.1, AL035246.13, AC025613.14,

					AL021393.1, AC007649.12, AL353633.13, AP001671.1, AC006313.1, AL357559.16, AL355382.6, AP002364.3, AP002751.3, AL162495.18, AL035078.32, AL033525.10, AC021017.4, Z94721.1, AC013357.19, AC018514.7, AL391495.16, AC074344.5, AL512368.9, AL161757.4, AC012172.6, AP001835.4, AC007065.5, AC000389.1, AP001189.4, AC010888.12, AL392108.4, AL512484.13, AC009410.3, AC090710.16, AL357332.11, AL109759.4, AC063951.22, AL391683.8, AL160399.13, AC007392.3, AC004768.1, AL121896.11, AL022240.8, AL033533.5, AL109921.21, AF165175.2, AC024584.5, AL353802.14, AC026811.4, AP001597.1, AL032822.1, AC022267.8, AC003085.1, AL390799.4, AL096791.12, AC0073308.4, AL133385.8, AL138694.18, AL137139.9, AC009509.7, AC068812.13, AC007631.3, AL109842.7, AC009507.3, AC073617.16, AC026694.4, AC004911.1, AC008834. 6.
HWDAH38	621	102851 9	1 - 1590	15 - 1604	AA410788, AU147162, AW069227, AW805539, A1278089, AW578373, BF769368, AW054995, A1733856, A1890324, AW849032, A1923052, AA547979, AU144540, A1634187, A1056177, AA847499, BF681619, AW861303, AW500029, AA916430, AV762633, A1457313, AA228778, BG250286, A1732389, A1754653, BE138594, BF675251, A1537020, AW973992, AA158190, A1679002, AW168433, A1891080, AW514662, AL079734, BE062159, AA515728, AA491423, BF832074, AA832145, BE897079, AW674631, AW798093, BF725178, A1049630, AW068596, AA579179, BG115297, AW004884, AW084445, A1923050, AW575000, A1282479, AU152561, AL120282, BF917346, AW338035, AW338021, AL038842, AA719073, AV762009, T09219, AW971987, AW338179, AA669155, AA502991, BG222875, A1279417, AA491955, AA236867, AA640710, AW872575, A1254770, AA223174, BE042511, A1821714, A1791913, AV756491, A1284126, A1792133, A1821785, BE139139, A1251034, AA176604, AW302315, AA569648, BG236628, AV759518, AA714110, A1133164, AC008481.7, AE006639.1, AC006057.5, AL049776.3, AC004846.2, AL035404.20, AC008397.7, AL355593.21, AC002544.1, AL031311.1, AL590762.1, AC002045.1, AJ400877.1, AP001051.1, AC004882.2, AC004840.3, AC008623.4, AP000046.1, AF129756.1, AC007021.3, AL136526.27, AL133367.4, AC007957.36, AL513131.1, AC008569.6, AC008687.4, AL137077.31, AL359252.17, AC010543.8, AC007216.2, AC016601.6, AC011449.6, Z83844.5, AF038458.1, AC008891.7, Z83845.14, AC007686.5, AL050318.13, AC011500.7, AC004024.2, AL022323.7, AC002073.1, AC019184.3, AL359236.4, AF288742.1, Z95115.1, AC003667.1, AL445222.9, AC008280.4, AL353802.14, AC010616.5, AC009131.6, AC004531.1, AP001721.1, AL358777.12, AL139317.5, AC005037.2, AL031666.6, AC002553.1, AL359092.14, AL163300.2, AL162426.20, AL163249.2, AF047825.1, AL079335.29, AC005015.2, U95740.1, AL133163.2, AL121586.31, AC004228.2, AC005049.2, AC004867.5, AL118520.26, AL391833.10, AC002365.1, AP000356.1, AC090517.2, AL590763.1, AC008395.6, AL139415.10, AL031717.11, AL354864.16, AC009996.7, AP001718.1, AC008543.7, AL354735.14, AC005079.6, AF243527.1, AC080012.20, AC005280.3, AL033518.14, AL354760.11, AL035406.25, AC040160.4, AC034193.4, AL356915.19, AC079177.21, AC005488.2, AC020917.4, AC008812.7, AC018663.3, AC005052.2, AP001724.1, AC005972.1, AC051619.7, AC006441.13, AC008074.3, AC010422.7, AC006285.11,

					AC011740.7, AL024498.12, AJ251973.1, AP001717.1, U95742.1, AC006487.8, AL355312.24, AL157823.9, AC005746.1, AP000113.1, AP000045.1, AP001716.1, AC003101.1, AL139113.21, AF131215.1, AL139099.2, AC006511.5, AC011470.5, AC005182.2, AC006064.9, AC004865.1, AC008753.8, AL078461.38, Z95114.19, AL022476.2, AC005668.1, AL031602.14, AL121972.17, AC005695.1, AC011811.42, AC008018.20, AC004098.1, AC004491.1, AC022467.7, AC011484.4, AL121949.13, AL139396.17, AL121895.26, AC027319.5, AC004921.1, AC005291.1, AL13008.14, AC006530.4, AF001549.1, AC007263.4, AL049760.26, AL049869.6, AC011487.5, AC016830.5, AC069262.24, AL132780.5, AC012442.7, AL034405.16, AB023049.1, AL354798.13, AC009228.4, AL109947.19, AF053356.1, AF024533.1, AL353616.13, AP000557.2, AL080243.21, AL161937.13, AC005103.3, AC068799.14, AC084865.2, AC011718.2, AC004821.3, AC007842.1, AC005696.1, AL450325.5, AC007450.1, AL512883.5, AC011471.6, AL133500.3, AL512638.5, AC003664.1, AC024028.10, AC003098.1, AP001753.1, AC010530.7, AC009412.6, AL121905.23, AC004812.1, AC004020.1, AP001693.1, AP001667.1, AL355833.4, AL360179.8, AC007376.9, AL137139.9, AF111169.2, AC005098.2, AF001548.1, AL009181.1, AC004590.1, AP001670.1, AC026161.4, AL109804.41, AL035072.16, AP001725.1, AF139813.1, AL033529.25, AP000116.1, AC027644.9, AL137818.3, AC073593.13, AL080242.11, AC009154.5, AF235097.1, Z83826.12, AP001710.1, AC007371.16, AF219991.1, AP000043.1, AP000111.1, AC007151.2, AL136295.3, AC005519.3, AC005020.5, AL449305.4, AC016025.12, AC002549.1, AL163281.2, AC007390.3, AL024474.1, AL157886.11, AC007541.9, AC011479.6, AL022238.1, AL353692.14, AC005080.2, AC006356.3, AL109798.19, AP001714.1, Z98200.8, AL109797.18, AL121601.13, AL365505.15, AC005295.1, AC008551.5.
HWHGP71	622	995431	1 - 1007	15 - 1021	AA927633, BE206519, H85594, AA019612, BF379185, BF829931, AF308571.1, AB008193.1, AF277230.1, AB029892.1, AJ278605.1, AF190901.1, D89079.1, U41070.1.
HWHGQ49	623	135225 7	1 - 971	15 - 985	BE907577, AU126910, AL533833, BE731437, AW970004, BF967077, BE788909, BF207957, BF343694, BE737688, BE866037, BE272694, BF208159, H17761, BE564507, R52799, BF965044, BF208977, BF676791, N94214, AV657236, BF725860, N91665, AA588382, BF725223, H70673, BF813629, R17380, R22829, BE772590, H55988, BE962738, BF210281, BF889390, BF208466, C04806, N80329, D56451, AI797289, H59335, BF879857, AW008969, AI394269, BE795342, D56220, BE740614, BE793846, BF732877, AI541453, R01796, BE903639, BE790851, BF880011, Z36872, AW582547, BE267419, BE742662, BF026122, BE735825, BE793469, BF949650, AW885466, AW009897, BG170115, AA248589, AW062936, AI148761, AI928801, AW858815, BE903214, BF689981, AW178925, T69554, AI278793, BE513607, AW363731, BE730258, BE393241, BE727175, AW263105, H93411, R62171, AA613553, N30347, BF125876, AA960959, BE265249, AA996071, AW818608, BF184855, AI026967, BF026858, AW069303, AA148228, BE958392, AA193652, AW577228, AA235201, BE887401, AW247577, H41429, BE799132, BF967713, BF243020, AA837473, AW247732, AI917109, R86909, BF211115, AV716597, T34155, AW577215, C05230, AA316485, AI751446, AI276480, AI750270, BE798194, BE934366, BE934317, BE934437, BE934332,

						AA865609, AW003912, T36130, BE267114, AI080595, R81681, N93270, AI383153, AK001347.1, AF153605.1, AF151861.1, AL136116.1, AL023581.1, AF197937.1, AK024765.1, BC003653.1, AL391726. 8.
HWHGU54	624	695695	1 - 1431	15 - 1445		AA458648, BE140448, AA455546, AL132708.3, AL132990. 3.
HWHGZ51	625	886212	1 - 1685	15 - 1699		BE735965, AW372956, BF826018, BE735558, AW007721, AI955624, N30735, BF842481, AA531286, BE735650, AA476961, AA479609, AA709157, N29329, BF813297, AI680020, BF814081, W72299, AW450151, BF349121, AI342682, BE713111, AI202736, BE713103, BE713065, AA459897, AI206356, W23589, BF349122, BE939515, BE714549, W76325, W35267, AW272943, AA158001, AA442947, BE713172, BG012569, T69460, AA321599, AW135072, AA369339, BE713162, AI202455, AA369441, N57021, W68131, BE713086, BE713074, T69437, BE713165, AI301772, T70492, T70513, BF738317, AW389438, BE717812, D29356, BE717821, AA127911, AA846442, AA127966, BF842499, BF739402, BE140441, BE048026, AV658585, AL037582, AL037602, BG179993, AI802542, AV741327, AI628337, BE184331, N29277, AL040241, AW079572, BF812960, BF792961, AV743962, BG114432, AI469505, AL042745, AV757865, AL079963, BF970768, AI698391, BG110684, AI499285, BE968711, BF751302, AI570807, AI345416, AI345612, BF726183, AI824576, BF724420, AI345415, BE789764, F37323, AI627988, BG256090, AL043355, BG113188, BF856052, AV658845, AI884318, AI491775, AV656595, BF924855, AI886594, BG104927, AW051088, BF032768, BG111560, AV713305, BF526020, AI540458, AA287231, AW880037, AV733448, AI288285, AW983832, BF725534, BE047852, BG029086, BF970652, AA580663, BE963838, BG167986, AI538850, AI580436, AW673679, BF055899, AI440239, AI685005, AI687295, BG058150, AA833760, AA225339, AI241923, AI568138, BE018334, BG033723, BF054877, BG115626, BF338002, AL042744, AW303152, BG001235, AI673363, BG030364, AW090393, AI783997, AL042191, BF812938, BF752245, BF727091, AI670009, AV718258, AW020561, AI433157, AI818358, AI702073, AI473536, BF911521, AV757052, BF868489, AV682124, AI682798, T95813, BF812961, AI570966, AL036214, AI345778, AI932794, AW163834, BE879108, AW827206, AI564259, BG110682, BG058398, AA641818, AI633125, AI866040, BE535384, AI538564, AI638798, AW161156, AI915291, AW152182, BG117375, AW051059, BF811804, AV681993, BG166654, AI866770, AL041150, AW104141, AI800440, BE877904, BF086116, AI433590, BE069120, AA806720, BE778453, BG180605, AL036673, BG112456, AI969655, AV733734, AL514887, AW827103, BG028116, BE964614, AI539847, AI863191, AI254727, AL039086, AI445992, BF885081, AI345608, BG029667, AI345688, AW083573, AI572717, AL036631, BF816037, AI613038, AW834302, BF909758, AW026882, AL038445, AI868931, R36271, BF872365, BG110517, BG257547, BG164558, AI267454, AI581033, AI623941, AI568114, AW167918, AA743354, AV714798, AV757035, AW983829, BF794478, AJ223603.2, AF082889.1, AC018758.2, AL353940.1, BC006472.1, AF132676.1, AF061836.1, AL137533.1, AL137294.1, AB055352.1, AF262032.1, AL137271.1, AL137480.1, AF056191.1, AL117435.1, AL080154.1, X72889.1, AK024538.1, BC004370.1, AB047941.1, AL389935.1, AL117460.1, BC002473.1, AL136845.1, BC006103.1, AL389939.1,

					AB050431.1, Z82022.1, AL512733.1, BC003548.1, AL122093.1, AB052191.1, AK026762.1, AL110221.1, AL049430.1, AL359583.1, AF217982.1, AF146568.1, AL050155.1, AB062750.1, AL137476.1, AL137557.1, AB060873.1, BC001655.1, X65873.1, AL512718.1, AB055371.1, AL137463.1, AB056427.1, AK027144.1, BC008282.1, AL442082.1, AK026600.1, AL133606.1, AF285167.1, AL122050.1, AB050410.1, AK026642.1, BC004925.1, AK025414.1, AB060908.1, AK025435.1, BC007534.1, AL136864.1, AL137488.1, AL080148.1, AL512719.1, AL512750.1, AK026480.1, BC003614.1, AL390154.1, BC004530.1, AB056421.1, BC007053.1, AK026593.1, AK024594.1, X82434.1, AK000418.1, AB047904.1, AB060929.1, AK027146.1, AL133665.1, AF104032.1, BC005007.1, BC008673.1, AB060826.1, AK026583.1, BC009395.1, AL359596.1, AB049758.1, AL137658.1, AL080137.1, AF100781.1, AF090934.1, AF358829.1, AL137478.1, AB055370.1, BC004899.1, AK026613.1, BC000090.1, AK026506.1, BC002733.1, AF321617.1, AB062978.1, AL137479.1, S61953.1, BC005858.1, AF218031.1, AK026885.1, BC002523.1, BC000348.1, AF061795.1, AF151685.1, AY034001.1, AK026542.1, AF320073.1, AF026816.2, AK024992.1, AK027081.1, AJ299431.1, AK026626.1, BC008417.1, AL137550.1, AK025491.1, AL359601.1, AL117578.1, AL136893.1, AL359618.1, U80742.1, AF111112.1, BC008387.1, AK027096.1, AL133640.1, AF225424.1, AL137459.1, AF183393.1, BC004958.1, AB048975.1, AB063079.1, AB056809.1, AB052200.1, AK026927.1, AF061943.1, AL096744.1, AF090901.1, AF057300.1, AF057299.1, X98834.1, AL133067.1, Y16645.1, AL133558.1, AK026528.1, AB063070.1, AK027161.1, BC006440.1, AF177336.1, AL136844.1, AB056420.1, AL137538.1, AB063093.1, AK027164.1, AL136843.1, BC007567.1, AL133075.1, AK025312.1, AF125948.1, AL583915.1, AL157431.1, AK025484.1, BC008078.1, BC008893.1, AK025465.1, AL137548.1, AL137521.1, AL136784.1, AL050366.1, AK027868.1, AF230496.1, AK026855.1, AB060905.1, AB060837.1, AL096720.1, AK026462.1, AL136540.1, BC004349.1, X69819.1, BC004951.1, BC004362.1, BC009212.1, Y14314.1, AL050149.1, AL110225.1, AL122098.1, AL136892.1, AL389982.1, AL136805.1, AL050277.1, AK026504.1, AK025391.1, AK027121.1, AB048953.1, AC021325.5, AL512754.1, AB063074.1, AK026630.1, AL080234.1, AL162062.1, AL359620.1, AB063100.1, BC001844.1, AB055361.1, AK024570.1, BC008983.1, AL359941.1, AB060912.1, BC003683.1, AB060897.1, AF143723.1, BC005168.1, AK026744.1, AL117416.1, BC004195.1, AK026784.1, AL122100.1, AL122118.1, AB056768.1, AY033593.1, BC007499.1, AL110280.1, AL133560.1, AL080124.1, AK026647.1, BC009033.1, AK024588.1, AK026086.1, AL049283.1, BC008899.1, AB048919.1, AK026959.1, AK000647.1, AB048974.1, AL136792.1, Z37987.1, AL137529.1, BC007680.1, BC006525.1, BC001056.1, AL050116.1, BC003684.1, AL137558.1.
			1 - 1515	15 - 1529	AL529775, AL533489, AL524594, BF974297, AL516570, BG163363, BE881103, AI146476, BG120063, BE259554, BF342974, AV715318, BE789938, BG105343, AV755514, BE780157, BF691658, AW812911, BG024181, AW812981, BF213502, AV716562, BF698515, BG261045, BF574514, BF211692, BF033068, BF348164, AV759171, AV701423, BF035763, AW955608, AW812971, AW581981, BF677888, BF571378, BF576293, BF240656, AW390493, BE222633,
HWHHL34	626	805642			

					BF690640, BF576363, AW813018, BF699331, AV714362, BF978687, BE866124, BF672111, BF674211, BF670420, BE866568, AV755701, A1814859, BF665931, N92494, A1829932, BF698791, BF031127, W02193, BF671702, BF982689, BF184136, BF673226, W52978, AV681672, A1523284, AV753993, BF104739, AA192376, AW581987, AW390508, BF692915, AW367258, BF693474, BF977859, AA714791, BF036599, BF575352, BF671401, BE967567, BF242452, AV712182, BE891500, BF216657, BF681132, BF791182, AV716096, BE873981, AV733846, AW444946, BF031577, BE042514, BF215151, BF670720, BF573310, AW338919, AV712127, AV755085, AW369344, BE568177, BF213846, C05938, AL524593, BF243276, BF031685, BE973611, BF671286, AA309028, AW367331, BG258889, BF248358, BF693807, C14373, BF673387, BF666055, A1570372, BF970299, BF694056, A1886726, BF693641, AV751806, BF697207, C17464, AV759457, A1934573, BF214152, AA071179, BF819215, BF840385, BF131605, A1142543, BF575523, BF573716, BF574652, AA143582, BF106013, A1124903, AW162310, BF676442, BE855418, AA608786, BF239036, D59738, A1119812, BE874284, BF032570, AA430087, AW160345, BE961116, BF241468, BF843268, BF240051, AA977077, W16602, AA835662, AA080889, AA278398, BE568227, AW516026, A1066530, AA069864, AA569765, A1143310, AA665803, A1360862, A1277781, A1374863, A1138742, BG010683, BF693336, BE439719, BF988814, AA074132, A1376131, AV756060, BF675761, A1031953, A1953405, BF000793, AA928916, BE939314, AV755293, BF208002, AA446457, AA453448, BF575432, AA036868, AA904672, T93097, BE565473, A1684677, D59612, AV717305, A1167882, BF836349, A1300824, BF246928, R83429, AA583427, D80223, BF432205, R78724, BF671408, A187223, BE549552, AW016459, AA009661, A1267156, A1687932, BF998029, AW609216, W58390, R83437, A1091900, AA846357, BE866710, AV648956, A1075421, A1752663, AV744633, AV734138, AW401449, BF196720, AA078834, BF571477, A1032001, BF369911, A1057310, AW149028, AW836319, D80244, A1077911, AA143583, AA309029, BF382245, A1640870, A1934317, AA810465, BF239551, AA835669, C18148, N20411, BE866744, BF243507, AA932432, N44506, AA083615, AA724827, AA612714, AA775846, AFI25530.1, BC005143.1, AF070523.1, AF064854.1, T92495, T93191, T86811, T97284, T97396, R39633, R82460, H00317, H00365, H03492, H03590, H25943, H25977, H44243, H44581, R83332, R83338, H78436, N34780, N74004, W02766, W24795, W39502, AA069875, AA078872, AA084246, AA186346, AA426275.
HWLEV32	627	103260 2	1 - 1204	15 - 1218	AA677440, AW994068, AA368613, AW052024, A1633325, AA865554, AA011059, AA011060, AW955888, AU156208, BE177677, AF198488.1, AL137740. 1.
HWLIH65	628	793713	1 - 817	15 - 831	AW663887, AA702920, A1042498, BF981980, AA661749, AW401902, A1286001, AW237708, AA512902, AW503623, BE645601, AW405179, AW973049, Z39825, AA129086, AL134524, AW972845, AW975037, AW979204, AW975032, AW976024, AW979127, AW972292, AW975002, AW975965, AW975628, AW970942, AW861944, AW969988, AW971403, AW979098, AW975105, AW858525, AW975019, AW972849, AW025744, AW974801, AW971404, AW975954, AW877209, AW975031, AW969791, AW979002, AW974786, A1088353, AW973219, AW972867, AW979238, AL119324, AW971375, AW979212, AW970540, AW979090, AW979176, AW975154, AW979294,

					AW970079, AW973397, AW969673, AW971968, AW973717, AW976023, AW975971, AW969885, AW975876, AW975952, AW975649, AW969643, AW975020, AW975254, AW975025, AW975650, AW969680, AW974964, AW979106, AW858522, AW975981, AI824626, AW975942, AW970070, AW975028, AW968181, AW975027, AW975990, AW975434, AW970969, AW975966, AW975632, AW972680, AW976511, AW968212, AW974823, AW974975, AW969839, AW974338, AW973750, AW969816, AW974658, AW972296, AW971732, AW979169, AW969852, AW976000, AW976031, AW974785, AW969793, AW972721, AW979220, AW971975, AW969911, AW979219, AW970936, AW975230, AW975596, AW969637, AW975015, AW858455, AW968347, AW976982, AW979173, AW972880, AW972817, AW969748, AW975244, AW970050, AW975930, AW969861, AW975585, AW979147, AW973819, AW979142, AW974101, AW858526, AW970101, AW972154, AW968207, AW968204, AW451860, AW975022, AW971378, AW979232, AW970889, AW973214, AW975959, AW973254, AW972649, AW979133, AW979113, AW973785, AA456016, AW973654, AW969785, AW979208, AW970927, AW979211, AW974802, AW971326, AW971305, AW970107, AW976506, AW975626, AW970010, AW970113, AW976035, AW975231, AW975149, AW975084, AW972884, AW970025, AW972695, AW973805, AW972719, AW976515, AW969633, AW975921, AW969921, AW975157, AW979165, AW979054, AW971254, AW976510, AW971954, AW975941, AW974089, AW973230, AW975975, AW969778, AW969884, AW974962, AW972943, AW969759, AW979083, AW970387, AW979175, AW979037, AW973986, AW979064, AW975938, AW975016, AW970921, AW969766, AW979116, AW972806, AW973987, AW972706, AW973164, AW973824, AW970097, AW974393, AW970094, AW971964, AW975904, AW974379, AW969752, AW973718, AW973967, AW975933, AW973734, AW973207, AW972882, AW973104, AW969782, AW970868, AW972868, AW973985, AW975648, AW973821, AW971129, AW969930, AW972864, AW979178, AW969658, AW972883, AW979081, AW972933, AW975162, AW971183, AW971387, AW970110, AW972705, AW972827, AW973946, AW976012, AW972823, AW970589, AW971259, AW971350, AW975261, AW971367, BC008596.1, AK001798.1, AL122101.1, AL133053.1, AL136763.1, AL133049.1, AL133074.1, AL136755.1, AL136758.1, AL133076.1, AL136764.1, AL136762.1, DI7247.1, AL133082.1, AJ276251.1, AJ276253.1, AJ276255.1, AJ276256.1, AL133068.1, AB026436.1, AL136825.1, AJ276254.1, AL133655.1, AF141306.1, AL133020.1, AF002985.1, AF126531.1, Z69719.1, AE006462. 1.
HWTBK81	629	460568	1 - 623	15 - 637	T89795, AW769449, AA774621, AA954176, BF879355, H04799, BF879528, BE394321, R39277, T89429, R42299, AA873122, AC009238.4, AC008268.3, AC016683. 7.
HYAAJ71	630	826754	1 - 3323	15 - 3337	AV718385, AV718481, AV659465, AV659453, AV659577, AV659377, BF894682, AV704375, AI284640, AA581903, AL046205, AW576391, AW265385, AI334443, BG249643, AW265393, AW301350, AW270270, AW303196, AW502975, AI307201, AL046409, AI345654, AL042853, BG171422, AF330238, AI076616, AA533333, AI538852, BF680041, AA526787, AL037683, AI355206, AV738303, AV710066, AA584082, BF679304, AA491284, AI270117, AW419262, AW103758, AA468022, BF677892, BF816072, AI431303, AV730952, BG109996, AW274349,

					<p> BF918590, AI469968, AI537506, AW274346, BG107801, AW193265, AI368256, BF991286, AV658688, AV652936, AI963720, BF678911, AL120687, AA584201, AA490183, BF683672, AW438643, AV658733, AI281881, BF592200, AA126450, AL042420, AW872676, AW731867, AI148277, AA468131, BF813686, BF592311, AV740801, AW020992, AV763550, BF676981, BF914859, AV762009, AA610491, AI613280, AW473163, AW072587, AV710770, AV762959, AW162489, AW270382, BF724372, AI375542, AV761631, AV702857, AA521323, BF679274, AU148742, BE049095, AI358571, AI956131, BF725315, AW500353, AA584167, AW088718, AW872575, AI610376, AA629572, AL041690, BE967369, AV764398, AW970848, AA720702, AU145393, BF919090, AV757607, AI287651, AA613345, BF984160, AI432270, AI890918, AV759172, AF074677, AV739901, BF680639, AV764530, AW975425, AI718446, AW129001, BF697673, AV733830, AA528725, AV728425, AV764241, AA602047, AA491831, AI583283, BE139146, BF347791, AW969629, BF347740, F36306, AW799031, AW760937, BF965007, AI379719, AW265009, BG036337, AI568678, AW407578, AW472872, AV769107, AI064952, AI085719, AV763354, BF942454, AI350211, AU147800, AA722372, BF679107, AI064952, AI085719, AV763354, BF942454, AV762395, AA079348, AV704536, AA491814, AV725423, AV761155, BE206443, AA577959, BF841869, AI539563, AU154961, AL034405.16, AC006353.3, AC069262.24, AC004987.2, AL121972.17, AC026866.8, AC007371.16, AL136170.12, AC002395.1, AP000719.4, AL121601.13, AL356915.19, AP00140.1, AL136992.22, Z86061.1, AC068724.7, AC020916.7, AC008753.8, AF038458.1, AC009530.5, AC022384.4, AC008403.6, AL022238.1, AC005304.1, AC006989.3, AC068712.6, AL354763.17, AC010422.7, AC005548.1, AC007564.9, AC091492.1, AC018769.2, AP000088.1, AC004826.3, AP000228.1, L78833.1, AP000459.3, AC002126.1, AC003957.1, AP001718.1, AC008519.4, AC008249.14, AL133284.13, AC008946.6, AP002797.3, AL157838.24, AL009179.1, AL117381.32, AC011455.6, AC013737.4, AL096841.6, D84394.1, AP000508.1, AL157882.5, AL122035.6, AC012379.7, AL049759.10, AL136300.22, AC007384.3, AC006501.5, Z99128.1, AC008064.2, AC013429.12, AC006211.1, AC067722.21, AL137802.7, AL163973.1, AC002544.1, AC000066.1, AC004840.3, AC004453.1, AL354935.23, AC018696.4, AC024082.6, AC023114.5, AC007919.18, AL031904.1, AC019046.4, AC008812.7, AC023511.17, AC006285.11, AL391137.11, AL022323.7, AP001667.1, AP001714.1, AP001687.1, U67229.1, AP001972.4, AC008101.15, AC005291.1, AL163249.2, AL033378.12, AC005539.1, AP001694.1, AC002430.1, AC005358.1, AC007620.30, AC034193.4, U63313.1, AC004751.1, AP003357.2, AL356244.12, AL121899.37, AC022432.4, AC006006.2, AC009179.17, AC007318.4, AJ010770.1, AC027319.5, AL354720.14, AL135839.15, AF109907.1, Z82244.1, AL157938.22, AL139039.17, AL021453.1, AC012003.9, AC011484.4, AC002565.1, AL021154.1, AJ010598.1, AL161656.20, AP001717.1, AC018507.3, AL161742.7, AL355516.12, AC087071.2, AL158194.16, AL391807.13, AP000345.1, AL049869.6, AC004992.1, U91326.1, AC018808.4, AC022383.3, AC004547.1, AL450104.14, AC010102.3, AC010679.6, AL139385.12, AL365232.24, Z95152.1, AF196779.1, AC005907.1, AC010650.8, AP000755.4, AC004534.1, Z95116.1, AC005911.6, AL358214.10, AC007193.1, </p>
--	--	--	--	--	---

					<p> AP001835.4, AC005252.1, AC004008.1, AL133551.13, AC009947.2, AL096862.18, AC016027.15, AC006435.7, AC090952.2, AC020893.5, AC027458.4, AL132780.5, AP000517.1, AC006597.2, AL133279.7, AC019233.7, AC006040.3, AC005859.1, AC007272.3, AL135924.11, D83989.1, AC005914.1, AL121900.26, AC016697.8, AL022476.2, AC003101.1, AL135752.6, AL139809.16, AL031286.1, AC007324.55, AC006448.14, AL161799.19, AC008891.7, AC011497.6, AL138885.21, AL365475.1, AL357034.18, AC005412.6, Z69917.1, AC016830.5, AP001700.1, AL136338.4, AC073492.18, AC005393.1, AL035411.27, AC007561.4, AL354932.26, AL080242.11, AC020901.8, AC034198.6, AC004686.1, AL139021.6, AP000959.2, AL138726.12, AC004166.12, AC007014.1, AL353807.18, AL035659.22, AL049692.13, AC016601.6, AC005189.1, AL391833.10, AC005209.1, AC078878.20, AL450265.11, AC004678.1, AC011286.7, AC005940.3, AL162853.17, AC018719.4, AC084865.2, AP001716.1, AC004019.20, AL023280.1, AF200465.1, AL023807.6, AL359835.10, AC005375.4, AL451075.15, AC004213.1, AL136358.13, AC005694.3, AC026391.6, AC023473.3, AL356094.11, AC009144.5, AC015801.25, AL162426.20, AC005900.1, AC078846.2, AE006462.1, AL359236.4, AL356481.16, AC016894.7, AL355497.14, AL136969.7, AL359265.8, AP003466.2, AL008715. 1. </p>
--	--	--	--	--	--

Description of Table 4

Table 4 provides a key to the tissue/cell source identifier code disclosed in Table 1B.2, column 5. Column 1 of Table 4 provides the tissue/cell source identifier code disclosed in Table 1B.2, Column 5. Columns 2-5 provide a description of the tissue or cell source. Note that "Description" and "Tissue" sources (i.e. columns 2 and 3) having the prefix "a_" indicates organs, tissues, or cells derived from "adult" sources. Codes corresponding to diseased tissues are indicated in column 6 with the word "disease." The use of the word "disease" in column 6 is non-limiting. The tissue or cell source may be specific (e.g. a neoplasm), or may be disease-associated (e.g., a tissue sample from a normal portion of a diseased organ). Furthermore, tissues and/or cells lacking the "disease" designation may still be derived from sources directly or indirectly involved in a disease state or disorder, and therefore may have a further utility in that disease state or disorder. In numerous cases where the tissue/cell source is a library, column 7 identifies the vector used to generate the library.

Table 4

<u>Code</u>	<u>Description</u>	<u>Tissue</u>	<u>Organ</u>	<u>Cell Line</u>	<u>Disease</u>	<u>Vector</u>
AR022	a Heart	a Heart				
AR023	a Liver	a Liver				
AR024	a mammary gland	a mammary gland				
AR025	a Prostate	a Prostate				
AR026	a small intestine	a small intestine				
AR027	a Stomach	a Stomach				
AR028	Blood B cells	Blood B cells				
AR029	Blood B cells activated	Blood B cells activated				
AR030	Blood B cells resting	Blood B cells resting				
AR031	Blood T cells activated	Blood T cells activated				
AR032	Blood T cells resting	Blood T cells resting				
AR033	brain	brain				
AR034	breast	breast				
AR035	breast cancer	breast cancer				
AR036	Cell Line CAOV3	Cell Line CAOV3				
AR037	cell line PA-1	cell line PA-1				
AR038	cell line transformed	cell line transformed				
AR039	colon	colon				
AR040	colon (9808co65R)	colon (9808co65R)				
AR041	colon (9809co15)	colon (9809co15)				
AR042	colon cancer	colon cancer				
AR043	colon cancer (9808co64R)	colon cancer (9808co64R)				
AR044	colon cancer 9809co14	colon cancer 9809co14				
AR050	Donor II B Cells 24hrs	Donor II B Cells 24hrs				
AR051	Donor II B Cells 72hrs	Donor II B Cells 72hrs				
AR052	Donor II B-Cells 24 hrs.	Donor II B-Cells 24 hrs.				
AR053	Donor II B-Cells 72hrs	Donor II B-Cells 72hrs				

AR054	Donor II Resting B Cells	Donor II Resting B Cells					
AR055	Heart	Heart					
AR056	Human Lung (clonotech)	Human Lung (clonotech)					
AR057	Human Mammary (clonotech)	Human Mammary (clonotech)					
AR058	Human Thymus (clonotech)	Human Thymus (clonotech)					
AR059	Jurkat (unstimulated)	Jurkat (unstimulated)					
AR060	Kidney	Kidney					
AR061	Liver	Liver					
AR062	Liver (Clonotech)	Liver (Clonotech)					
AR063	Lymphocytes chronic lymphocytic leukaemia	Lymphocytes chronic lymphocytic leukaemia					
AR064	Lymphocytes diffuse large B cell lymphoma	Lymphocytes diffuse large B cell lymphoma					
AR065	Lymphocytes follicular lymphoma	Lymphocytes follicular lymphoma					
AR066	normal breast	normal breast					
AR067	Normal Ovarian (4004901)	Normal Ovarian (4004901)					
AR068	Normal Ovary 9508G045	Normal Ovary 9508G045					
AR069	Normal Ovary 9701G208	Normal Ovary 9701G208					
AR070	Normal Ovary 9806G005	Normal Ovary 9806G005					
AR071	Ovarian Cancer	Ovarian Cancer					
AR072	Ovarian Cancer (9702G001)	Ovarian Cancer (9702G001)					
AR073	Ovarian Cancer (9707G029)	Ovarian Cancer (9707G029)					
AR074	Ovarian Cancer (9804G011)	Ovarian Cancer (9804G011)					
AR075	Ovarian Cancer (9806G019)	Ovarian Cancer (9806G019)					
AR076	Ovarian Cancer	Ovarian Cancer					

	(9807G017)	(9807G017)							
AR077	Ovarian Cancer (9809G001)	Ovarian Cancer (9809G001)							
AR078	ovarian cancer 15799	ovarian cancer 15799							
AR079	Ovarian Cancer 17717AID	Ovarian Cancer 17717AID							
AR080	Ovarian Cancer 4004664B1	Ovarian Cancer 4004664B1							
AR081	Ovarian Cancer 4005315A1	Ovarian Cancer 4005315A1							
AR082	ovarian cancer 94127303	ovarian cancer 94127303							
AR083	Ovarian Cancer 96069304	Ovarian Cancer 96069304							
AR084	Ovarian Cancer 9707G029	Ovarian Cancer 9707G029							
AR085	Ovarian Cancer 9807G045	Ovarian Cancer 9807G045							
AR086	ovarian cancer 9809G001	ovarian cancer 9809G001							
AR087	Ovarian Cancer 9905C032RC	Ovarian Cancer 9905C032RC							
AR088	Ovarian cancer 9907 C00 3rd	Ovarian cancer 9907 C00 3rd							
AR089	Prostate	Prostate							
AR090	Prostate (clonotech)	Prostate (clonotech)							
AR091	prostate cancer	prostate cancer							
AR092	prostate cancer #15176	prostate cancer #15176							
AR093	prostate cancer #15509	prostate cancer #15509							
AR094	prostate cancer #15673	prostate cancer #15673							
AR095	Small Intestine (Clonotech)	Small Intestine (Clonotech)							
AR096	Spleen	Spleen							
AR097	Thymus T cells activated	Thymus T cells activated							

AR098	Thymus T cells resting	Thymus T cells resting					
AR099	Tonsil	Tonsil					
AR100	Tonsil germinal center centroblast	Tonsil germinal center centroblast					
AR101	Tonsil germinal center B cell	Tonsil germinal center B cell					
AR102	Tonsil lymph node	Tonsil lymph node					
AR103	Tonsil memory B cell	Tonsil memory B cell					
AR104	Whole Brain	Whole Brain					
AR105	Xenograft ES-2	Xenograft ES-2					
AR106	Xenograft SW626	Xenograft SW626					
AR119	001: IL-2	001: IL-2					
AR120	001: IL-2.1	001: IL-2.1					
AR121	001: IL-2 b	001: IL-2 b					
AR124	002 : Monocytes untreated (1hr)	002 : Monocytes untreated (1hr)					
AR125	002 : Monocytes untreated (5hrs)	002 : Monocytes untreated (5hrs)					
AR126	002: Control.1C	002: Control.1C					
AR127	002: IL2.1C	002: IL2.1C					
AR130	003 : Placebo-treated Rat Lacrimal Gland	003 : Placebo-treated Rat Lacrimal Gland					
AR131	003 : Placebo-treated Rat Submandibular Gland	003 : Placebo-treated Rat Submandibular Gland					
AR135	004 : Monocytes untreated (5hrs)	004 : Monocytes untreated (5hrs)					
AR136	004 : Monocytes untreated 1hr	004 : Monocytes untreated 1hr					
AR139	005: Placebo (48hrs)	005: Placebo (48hrs)					
AR140	006: pC4 (24hrs)	006: pC4 (24hrs)					
AR141	006: pC4 (48hrs)	006: pC4 (48hrs)					
AR152	007: PHA(1hr)	007: PHA(1hr)					

AR153	007: PHA(6HRS)	007: PHA(6HRS)					
AR154	007: PMA(6hrs)	007: PMA(6hrs)					
AR155	008: 1449 #2	008: 1449 #2					
AR161	01: A - max 24	01: A - max 24					
AR162	01: A - max 26	01: A - max 26					
AR163	01: A - max 30	01: A - max 30					
AR164	01: B - max 24	01: B - max 24					
AR165	01: B - max 26	01: B - max 26					
AR166	01: B - max 30	01: B - max 30					
AR167	1449 Sample	1449 Sample					
AR168	3T3P10 1.0uM insulin	3T3P10 1.0uM insulin					
AR169	3T3P10 10nM Insulin	3T3P10 10nM Insulin					
AR170	3T3P10 10uM insulin	3T3P10 10uM insulin					
AR171	3T3P10 No Insulin	3T3P10 No Insulin					
AR172	3T3P4	3T3P4					
AR173	Adipose (41892)	Adipose (41892)					
AR174	Adipose Diabetic (41611)	Adipose Diabetic (41611)					
AR175	Adipose Diabetic (41661)	Adipose Diabetic (41661)					
AR176	Adipose Diabetic (41689)	Adipose Diabetic (41689)					
AR177	Adipose Diabetic (41706)	Adipose Diabetic (41706)					
AR178	Adipose Diabetic (42352)	Adipose Diabetic (42352)					
AR179	Adipose Diabetic (42366)	Adipose Diabetic (42366)					
AR180	Adipose Diabetic (42452)	Adipose Diabetic (42452)					
AR181	Adipose Diabetic (42491)	Adipose Diabetic (42491)					

AR182	Adipose Normal (41843)	Adipose Normal (41843)						
AR183	Adipose Normal (41893)	Adipose Normal (41893)						
AR184	Adipose Normal (42452)	Adipose Normal (42452)						
AR185	Adrenal Gland	Adrenal Gland						
AR186	Adrenal Gland + Whole Brain	Adrenal Gland + Whole Brain						
AR187	B7(1hr)+ (inverted)	B7(1hr)+ (inverted)						
AR188	Breast (18275A2B)	Breast (18275A2B)						
AR189	Breast (4004199)	Breast (4004199)						
AR190	Breast (4004399)	Breast (4004399)						
AR191	Breast (4004943B7)	Breast (4004943B7)						
AR192	Breast (4005570B1)	Breast (4005570B1)						
AR193	Breast Cancer (4004127A30)	Breast Cancer (4004127A30)						
AR194	Breast Cancer (400443A21)	Breast Cancer (400443A21)						
AR195	Breast Cancer (4004643A2)	Breast Cancer (4004643A2)						
AR196	Breast Cancer (4004710A7)	Breast Cancer (4004710A7)						
AR197	Breast Cancer (4004943A21)	Breast Cancer (4004943A21)						
AR198	Breast Cancer (400553A2)	Breast Cancer (400553A2)						
AR199	Breast Cancer (9805C046R)	Breast Cancer (9805C046R)						
AR200	Breast Cancer (9806C012R)	Breast Cancer (9806C012R)						
AR201	Breast Cancer (ODQ 45913)	Breast Cancer (ODQ 45913)						
AR202	Breast Cancer (ODQ45913)	Breast Cancer (ODQ45913)						
AR203	Breast Cancer	Breast Cancer						

	(ODQ4591B)	(ODQ4591B)							
AR204	Colon Cancer (15663)	Colon Cancer (15663)							
AR205	Colon Cancer (4005144A4)	Colon Cancer (4005144A4)							
AR206	Colon Cancer (4005413A4)	Colon Cancer (4005413A4)							
AR207	Colon Cancer (4005570B1)	Colon Cancer (4005570B1)							
AR208	Control RNA #1	Control RNA #1							
AR209	Control RNA #2	Control RNA #2							
AR210	Cultured Preadipocyte (blue)	Cultured Preadipocyte (blue)							
AR211	Cultured Preadipocyte (Red)	Cultured Preadipocyte (Red)							
AR212	Donor II B-Cells 24hrs	Donor II B-Cells 24hrs							
AR213	Donor II Resting B-Cells	Donor II Resting B-Cells							
AR214	H114EPI2 10nM Insulin	H114EPI2 10nM Insulin							
AR215	H114EPI2 (10nM insulin)	H114EPI2 (10nM insulin)							
AR216	H114EPI2 (2.6ug/ul)	H114EPI2 (2.6ug/ul)							
AR217	H114EPI2 (3.6ug/ul)	H114EPI2 (3.6ug/ul)							
AR218	HUVEC #1	HUVEC #1							
AR219	HUVEC #2	HUVEC #2							
AR221	L6 undiff.	L6 undiff.							
AR222	L6 Undifferentiated	L6 Undifferentiated							
AR223	L6P8 + 10nM Insulin	L6P8 + 10nM Insulin							
AR224	L6P8 + HS	L6P8 + HS							
AR225	L6P8 10nM Insulin	L6P8 10nM Insulin							
AR226	Liver (00-06-A007B)	Liver (00-06-A007B)							
AR227	Liver (96-02-A075)	Liver (96-02-A075)							
AR228	Liver (96-03-A144)	Liver (96-03-A144)							
AR229	Liver (96-04-A138)	Liver (96-04-A138)							

AR230	Liver (97-10-A074B)	Liver (97-10-A074B)					
AR231	Liver (98-09-A242A)	Liver (98-09-A242A)					
AR232	Liver Diabetic (1042)	Liver Diabetic (1042)					
AR233	Liver Diabetic (41616)	Liver Diabetic (41616)					
AR234	Liver Diabetic (41955)	Liver Diabetic (41955)					
AR235	Liver Diabetic (42352R)	Liver Diabetic (42352R)					
AR236	Liver Diabetic (42366)	Liver Diabetic (42366)					
AR237	Liver Diabetic (42483)	Liver Diabetic (42483)					
AR238	Liver Diabetic (42491)	Liver Diabetic (42491)					
AR239	Liver Diabetic (99-09-A281A)	Liver Diabetic (99-09-A281A)					
AR240	Lung	Lung					
AR241	Lung (27270)	Lung (27270)					
AR242	Lung (2727Q)	Lung (2727Q)					
AR243	Lung Cancer (4005116A1)	Lung Cancer (4005116A1)					
AR244	Lung Cancer (4005121A5)	Lung Cancer (4005121A5)					
AR245	Lung Cancer (4005121A5))	Lung Cancer (4005121A5))					
AR246	Lung Cancer (4005340A4)	Lung Cancer (4005340A4)					
AR247	Mammary Gland	Mammary Gland					
AR248	Monocyte (CT)	Monocyte (CT)					
AR249	Monocyte (OCT)	Monocyte (OCT)					
AR250	Monocytes (CT)	Monocytes (CT)					
AR251	Monocytes (INFG 18 hr)	Monocytes (INFG 18 hr)					
AR252	Monocytes (INFG 18hr)	Monocytes (INFG 18hr)					
AR253	Monocytes (INFG 8-11)	Monocytes (INFG 8-11)					
AR254	Monocytes (O CT)	Monocytes (O CT)					
AR255	Muscle (91-01-A105)	Muscle (91-01-A105)					
AR256	Muscle (92-04-A059)	Muscle (92-04-A059)					

AR257	Muscle (97-11-A056d)	Muscle (97-11-A056d)					
AR258	Muscle (99-06-A210A)	Muscle (99-06-A210A)					
AR259	Muscle (99-07-A203B)	Muscle (99-07-A203B)					
AR260	Muscle (99-7-A203B)	Muscle (99-7-A203B)					
AR261	Muscle Diabetic (42352R)	Muscle Diabetic (42352R)					
AR262	Muscle Diabetic (42366)	Muscle Diabetic (42366)					
AR263	NK-19 Control	NK-19 Control					
AR264	NK-19 IL Treated 72hrs	NK-19 IL Treated 72hrs					
AR265	NK-19 UK Treated 72 hrs.	NK-19 UK Treated 72 hrs.					
AR266	Omentum Normal (94-08-B009)	Omentum Normal (94-08-B009)					
AR267	Omentum Normal (97-01-A039A)	Omentum Normal (97-01-A039A)					
AR268	Omentum Normal (97-04-A114C)	Omentum Normal (97-04-A114C)					
AR269	Omentum Normal (97-06-A117C)	Omentum Normal (97-06-A117C)					
AR270	Omentum Normal (97-09-B004C)	Omentum Normal (97-09-B004C)					
AR271	Ovarian Cancer (17717AID)	Ovarian Cancer (17717AID)					
AR272	Ovarian Cancer (9905C023RC)	Ovarian Cancer (9905C023RC)					
AR273	Ovarian Cancer (9905C032RC)	Ovarian Cancer (9905C032RC)					
AR274	Ovary (9508G045)	Ovary (9508G045)					
AR275	Ovary (9701G208)	Ovary (9701G208)					
AR276	Ovary 9806G005	Ovary 9806G005					
AR277	Pancreas	Pancreas					
AR278	Placebo	Placebo					
AR279	rIL2 Control	rIL2 Control					

AR280	RSS288L	RSS288L							
AR281	RSS288LC	RSS288LC							
AR282	Salivary Gland	Salivary Gland							
AR283	Skeletal Muscle	Skeletal Muscle							
AR284	Skeletal Muscle (91-01-A105)	Skeletal Muscle (91-01-A105)							
AR285	Skeletal Muscle (42180)	Skeletal Muscle (42180)							
AR286	Skeletal Muscle (42386)	Skeletal Muscle (42386)							
AR287	Skeletal Muscle (42461)	Skeletal Muscle (42461)							
AR288	Skeletal Muscle (91-01-A105)	Skeletal Muscle (91-01-A105)							
AR289	Skeletal Muscle (92-04-A059)	Skeletal Muscle (92-04-A059)							
AR290	Skeletal Muscle (96-08-A171)	Skeletal Muscle (96-08-A171)							
AR291	Skeletal Muscle (97-07-A190A)	Skeletal Muscle (97-07-A190A)							
AR292	Skeletal Muscle Diabetic (42352)	Skeletal Muscle Diabetic (42352)							
AR293	Skeletal Muscle Diabetic (42366)	Skeletal Muscle Diabetic (42366)							
AR294	Skeletal Muscle Diabetic (42395)	Skeletal Muscle Diabetic (42395)							
AR295	Skeletal Muscle Diabetic (42483)	Skeletal Muscle Diabetic (42483)							
AR296	Skeletal Muscle Diabetic (42491)	Skeletal Muscle Diabetic (42491)							
AR297	Skeletal Muscle Diabetic 42352	Skeletal Muscle Diabetic 42352							
AR298	Skeletal Muscle (42461)	Skeletal Muscle (42461)							
AR299	Small Intestine	Small Intestine							
AR300	Stomach	Stomach							
AR301	T-Cell + HDPBQ71.fc	T-Cell + HDPBQ71.fc							

	1449 16hrs	1449 16hrs						
AR302	T-Cell + HDPBQ71.fc 1449 6hrs	T-Cell + HDPBQ71.fc 1449 6hrs						
AR303	T-Cell + IL2 16hrs	T-Cell + IL2 16hrs						
AR304	T-Cell + IL2 6hrs	T-Cell + IL2 6hrs						
AR306	T-Cell Untreated 16hrs	T-Cell Untreated 16hrs						
AR307	T-Cell Untreated 6hrs	T-Cell Untreated 6hrs						
AR308	T-Cells 24 hours	T-Cells 24 hours						
AR309	T-Cells 24 hrs	T-Cells 24 hrs						
AR310	T-Cells 24 hrs.	T-Cells 24 hrs.						
AR311	T-Cells 24hrs	T-Cells 24hrs						
AR312	T-Cells 4 days	T-Cells 4 days						
AR313	Thymus	Thymus						
AR314	TRE	TRE						
AR315	TREC	TREC						
AR317	B lymphocyte,	B lymphocyte,						
AR318	(non-T; non-B)	(non-T; non-B)						
AR326	001 - 293 RNA (Vector Control)	001 - 293 RNA (Vector Control)						
AR327	001: Control	001: Control						
AR328	001: Control.1	001: Control.1						
AR355	Acute Lymphocyte Leukemia	Acute Lymphocyte Leukemia						
AR356	AML Patient #11	AML Patient #11						
AR357	AML Patient #2	AML Patient #2						
AR358	AML Patient #2 SGAH	AML Patient #2 SGAH						
AR359	AML Patient#2	AML Patient#2						
AR360	Aorta	Aorta						
AR361	B Cell	B Cell						
AR362	B lymphoblast	B lymphoblast						
AR363	B lymphocyte	B lymphocyte						
AR364	B lymphocytes	B lymphocytes						

AR365	B-cell	B-cell							
AR366	B-Cells	B-Cells							
AR367	B-Lymphoblast	B-Lymphoblast							
AR368	B-Lymphocytes	B-Lymphocytes							
AR369	Bladder	Bladder							
AR370	Bone Marrow	Bone Marrow							
AR371	Bronchial Epithelial Cell	Bronchial Epithelial Cell							
AR372	Bronchial Epithelial Cells	Bronchial Epithelial Cells							
AR373	Caco-2A	Caco-2A							
AR374	Caco-2B	Caco-2B							
AR375	Caco-2C	Caco-2C							
AR376	Cardiac #1	Cardiac #1							
AR377	Cardiac #2	Cardiac #2							
AR378	Chest Muscle	Chest Muscle							
AR381	Dendritic Cell	Dendritic Cell							
AR382	Dendritic cells	Dendritic cells							
AR383	E.coli	E.coli							
AR384	Epithelial Cells	Epithelial Cells							
AR385	Esophagus	Esophagus							
AR386	FPPS	FPPS							
AR387	FPPSC	FPPSC							
AR388	HepG2 Cell Line	HepG2 Cell Line							
AR389	HepG2 Cell line Buffer 1 hr.	HepG2 Cell line Buffer 1 hr.							
AR390	HepG2 Cell line Buffer 06 hr	HepG2 Cell line Buffer 06 hr							
AR391	HepG2 Cell line Buffer 24 hr.	HepG2 Cell line Buffer 24 hr.							
AR392	HepG2 Cell line Insulin 01 hr.	HepG2 Cell line Insulin 01 hr.							
AR393	HepG2 Cell line Insulin	HepG2 Cell line Insulin 06							

	06 hr.	hr.						
AR394	HepG2 Cell line Insulin 24 hr.	HepG2 Cell line Insulin 24 hr.						
AR398	HMC-1	HMC-1						
AR399	HMCS	HMCS						
AR400	HMSC	HMSC						
AR401	HUVEC #3	HUVEC #3						
AR402	HUVEC #4	HUVEC #4						
AR404	KIDNEY NORMAL	KIDNEY NORMAL						
AR405	KIDNEY TUMOR	KIDNEY TUMOR						
AR406	KIDNEY TUMOR							
AR407	Lymph Node	Lymph Node						
AR408	Macrophage	Macrophage						
AR409	Megakarioblast	Megakarioblast						
AR410	Monocyte	Monocyte						
AR411	Monocytes	Monocytes						
AR412	Myocardium	Myocardium						
AR413	Myocardium #3	Myocardium #3						
AR414	Myocardium #4	Myocardium #4						
AR415	Myocardium #5	Myocardium #5						
AR416	NK	NK						
AR417	NK cell	NK cell						
AR418	NK cells	NK cells						
AR419	NKYa	NKYa						
AR420	NKYa019	NKYa019						
AR421	Ovary	Ovary						
AR422	Patient #11	Patient #11						
AR423	Peripheral blood	Peripheral blood						
AR424	Primary Adipocytes	Primary Adipocytes						
AR425	Promyeloblast	Promyeloblast						

AR427	RSSWT	RSSWT					
AR428	RSSWTC	RSSWTC					
AR429	SW 480(G1)	SW 480(G1)					
AR430	SW 480(G2)	SW 480(G2)					
AR431	SW 480(G3)	SW 480(G3)					
AR432	SW 480(G4)	SW 480(G4)					
AR433	SW 480(G5)	SW 480(G5)					
AR434	T Lymphoblast	T Lymphoblast					
AR435	T Lymphocyte	T Lymphocyte					
AR436	T-Cell	T-Cell					
AR438	T-Cell,	T-Cell,					
AR439	T-Cells	T-Cells					
AR440	T-lymphoblast	T-lymphoblast					
AR441	Th 1	Th 1					
AR442	Th 2	Th 2					
AR443	Th1	Th1					
AR444	Th2	Th2					
H0002	Human Adult Heart	Human Adult Heart			Heart		Uni-ZAP XR
H0004	Human Adult Spleen	Human Adult Spleen			Spleen		Uni-ZAP XR
H0007	Human Cerebellum	Human Cerebellum			Brain		Uni-ZAP XR
H0008	Whole 6 Week Old Embryo						Uni-ZAP XR
H0009	Human Fetal Brain						Uni-ZAP XR
H0011	Human Fetal Kidney	Human Fetal Kidney			Kidney		Uni-ZAP XR
H0012	Human Fetal Kidney	Human Fetal Kidney			Kidney		Uni-ZAP XR
H0013	Human 8 Week Whole Embryo	Human 8 Week Old Embryo			Embryo		Uni-ZAP XR
H0014	Human Gall Bladder	Human Gall Bladder			Gall Bladder		Uni-ZAP XR
H0015	Human Gall Bladder, fraction II	Human Gall Bladder			Gall Bladder		Uni-ZAP XR
H0016	Human Greater Omentum	Human Greater Omentum			peritoneum		Uni-ZAP XR

H0017	Human Greater Omentum	Human Greater Omentum	peritoneum			Uni-ZAP XR
H0020	Human Hippocampus	Human Hippocampus	Brain			Uni-ZAP XR
H0022	Jurkat Cells	Jurkat T-Cell Line				Lambda ZAP II
H0023	Human Fetal Lung					Uni-ZAP XR
H0024	Human Fetal Lung III	Human Fetal Lung	Lung			Uni-ZAP XR
H0025	Human Adult Lymph Node	Human Adult Lymph Node	Lymph Node			Lambda ZAP II
H0026	Namalwa Cells	Namalwa B-Cell Line, EBV immortalized				Lambda ZAP II
H0030	Human Placenta					Uni-ZAP XR
H0031	Human Placenta	Human Placenta	Placenta			Uni-ZAP XR
H0032	Human Prostate	Human Prostate	Prostate			Uni-ZAP XR
H0033	Human Pituitary	Human Pituitary				Uni-ZAP XR
H0036	Human Adult Small Intestine	Human Adult Small Intestine	Small Int.			Uni-ZAP XR
H0038	Human Testes	Human Testes	Testis			Uni-ZAP XR
H0039	Human Pancreas Tumor	Human Pancreas Tumor	Pancreas		disease	Uni-ZAP XR
H0040	Human Testes Tumor	Human Testes Tumor	Testis		disease	Uni-ZAP XR
H0041	Human Fetal Bone	Human Fetal Bone	Bone			Uni-ZAP XR
H0042	Human Adult Pulmonary	Human Adult Pulmonary	Lung			Uni-ZAP XR
H0044	Human Cornea	Human Cornea	eye			Uni-ZAP XR
H0045	Human Esophagus, Cancer	Human Esophagus, cancer	Esophagus		disease	Uni-ZAP XR
H0046	Human Endometrial Tumor	Human Endometrial Tumor	Uterus		disease	Uni-ZAP XR
H0047	Human Fetal Liver	Human Fetal Liver	Liver			Uni-ZAP XR
H0048	Human Pineal Gland	Human Pineal Gland				Uni-ZAP XR
H0050	Human Fetal Heart	Human Fetal Heart	Heart			Uni-ZAP XR
H0051	Human Hippocampus	Human Hippocampus	Brain			Uni-ZAP XR
H0052	Human Cerebellum	Human Cerebellum	Brain			Uni-ZAP XR
H0056	Human Umbilical Vein,	Human Umbilical Vein	Umbilical vein			Uni-ZAP XR

	Endo. remake	Endothelial Cells				
H0057	Human Fetal Spleen					Uni-ZAP XR
H0058	Human Thymus Tumor	Human Thymus Tumor	Thymus		disease	Lambda ZAP II
H0059	Human Uterine Cancer	Human Uterine Cancer	Uterus		disease	Lambda ZAP II
H0060	Human Macrophage	Human Macrophage	Blood	Cell Line		pBluescript
H0061	Human Macrophage	Human Macrophage	Blood	Cell Line		pBluescript
H0063	Human Thymus	Human Thymus	Thymus			Uni-ZAP XR
H0065	Human Esophagus, Normal	Human Esophagus, normal	Esophagus			Uni-ZAP XR
H0068	Human Skin Tumor	Human Skin Tumor	Skin		disease	Uni-ZAP XR
H0069	Human Activated T-Cells	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0070	Human Pancreas	Human Pancreas	Pancreas			Uni-ZAP XR
H0071	Human Infant Adrenal Gland	Human Infant Adrenal Gland	Adrenal gland			Uni-ZAP XR
H0075	Human Activated T-Cells (II)	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0076	Human Membrane Bound Polysomes	Human Membrane Bound Polysomes	Blood	Cell Line		Uni-ZAP XR
H0078	Human Lung Cancer	Human Lung Cancer	Lung		disease	Lambda ZAP II
H0081	Human Fetal Epithelium (Skin)	Human Fetal Skin	Skin			Uni-ZAP XR
H0083	HUMAN JURKAT MEMBRANE BOUND POLYSOMES	Jurkat Cells				Uni-ZAP XR
H0085	Human Colon	Human Colon				Lambda ZAP II
H0086	Human epithelioid sarcoma	Epithelioid Sarcoma, muscle	Sk Muscle		disease	Uni-ZAP XR
H0087	Human Thymus	Human Thymus				pBluescript
H0090	Human T-Cell Lymphoma	T-Cell Lymphoma	T-Cell		disease	Uni-ZAP XR
H0097	Human Adult Heart, subtracted	Human Adult Heart	Heart			pBluescript

H0098	Human Adult Liver, subtracted	Human Adult Liver	Liver			Uni-ZAP XR
H0099	Human Lung Cancer, subtracted	Human Lung Cancer	Lung			pBluescript
H0100	Human Whole Six Week Old Embryo	Human Whole Six Week Old Embryo	Embryo			Uni-ZAP XR
H0102	Human Whole 6 Week Old Embryo (II), subtr	Human Whole Six Week Old Embryo	Embryo			pBluescript
H0103	Human Fetal Brain, subtracted	Human Fetal Brain	Brain			Uni-ZAP XR
H0107	Human Infant Adrenal Gland, subtracted	Human Infant Adrenal Gland	Adrenal gland			pBluescript
H0108	Human Adult Lymph Node, subtracted	Human Adult Lymph Node	Lymph Node			Uni-ZAP XR
H0109	Human Macrophage, subtracted	Macrophage	Blood	Cell Line		pBluescript
H0110	Human Old Ovary, subtracted	Human Old Ovary	Ovary			pBluescript
H0111	Human Placenta, subtracted	Human Placenta	Placenta			pBluescript
H0116	Human Thymus Tumor, subtracted	Human Thymus Tumor	Thymus			pBluescript
H0118	Human Adult Kidney	Human Adult Kidney	Kidney			Uni-ZAP XR
H0120	Human Adult Spleen, subtracted	Human Adult Spleen	Spleen			Uni-ZAP XR
H0121	Human Cornea, subtracted	Human Cornea	eye			Uni-ZAP XR
H0122	Human Adult Skeletal Muscle	Human Skeletal Muscle	Sk Muscle			Uni-ZAP XR
H0123	Human Fetal Dura Mater	Human Fetal Dura Mater	Brain			Uni-ZAP XR
H0124	Human Rhabdomyosarcoma	Human Rhabdomyosarcoma	Sk Muscle	disease		Uni-ZAP XR
H0125	Cem cells cyclohexamide	Cyclohexamide Treated	Blood	Cell Line		Uni-ZAP XR

	treated	Cem, Jurkat, Raji, and Supt				
H0128	Jurkat cells, thiouridine activated	Jurkat Cells				Uni-ZAP XR
H0130	LNCAP untreated	LNCAP Cell Line	Prostate	Cell Line		Uni-ZAP XR
H0131	LNCAP + 0.3nM R1881	LNCAP Cell Line	Prostate	Cell Line		Uni-ZAP XR
H0132	LNCAP + 30nM R1881	LNCAP Cell Line	Prostate	Cell Line		Uni-ZAP XR
H0134	Raji Cells, cyclohexamide treated	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line		Uni-ZAP XR
H0135	Human Synovial Sarcoma	Human Synovial Sarcoma	Synovium			Uni-ZAP XR
H0136	Supt Cells, cyclohexamide treated	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line		Uni-ZAP XR
H0139	Activated T-Cells, 4 hrs.	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0140	Activated T-Cells, 8 hrs.	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0141	Activated T-Cells, 12 hrs.	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0144	Nine Week Old Early Stage Human	9 Wk Old Early Stage Human	Embryo			Uni-ZAP XR
H0147	Human Adult Liver	Human Adult Liver	Liver			Uni-ZAP XR
H0149	7 Week Old Early Stage Human, subtracted	Human Whole 7 Week Old Embryo	Embryo			Uni-ZAP XR
H0150	Human Epididymus	Epididymis	Testis			Uni-ZAP XR
H0151	Early Stage Human Liver	Human Fetal Liver	Liver			Uni-ZAP XR
H0154	Human Fibrosarcoma	Human Skin Fibrosarcoma	Skin		disease	Uni-ZAP XR
H0156	Human Adrenal Gland Tumor	Human Adrenal Gland Tumor	Adrenal Gland		disease	Uni-ZAP XR
H0158	Activated T-Cells, 4 hrs., ligation 2	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0159	Activated T-Cells, 8 hrs., ligation 2	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR

H0161	Activated T-Cells, 24 hrs., ligation 2	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0163	Human Synovium	Human Synovium	Synovium			Uni-ZAP XR
H0165	Human Prostate Cancer, Stage B2	Human Prostate Cancer, stage B2	Prostate		disease	Uni-ZAP XR
H0166	Human Prostate Cancer, Stage B2 fraction	Human Prostate Cancer, stage B2	Prostate		disease	Uni-ZAP XR
H0167	Activated T-Cells, 24 hrs.	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0169	Human Prostate Cancer, Stage C fraction	Human Prostate Cancer, stage C	Prostate		disease	Uni-ZAP XR
H0170	12 Week Old Early Stage Human	Twelve Week Old Early Stage Human	Embryo			Uni-ZAP XR
H0171	12 Week Old Early Stage Human, II	Twelve Week Old Early Stage Human	Embryo			Uni-ZAP XR
H0172	Human Fetal Brain, random primed	Human Fetal Brain	Brain			Lambda ZAP II
H0176	CAMA IEe Cell Line	CAMA IEe Cell Line	Breast	Cell Line		Uni-ZAP XR
H0177	CAMA IEe Cell Line	CAMA IEe Cell Line	Breast	Cell Line		Uni-ZAP XR
H0178	Human Fetal Brain	Human Fetal Brain	Brain			Uni-ZAP XR
H0179	Human Neutrophil	Human Neutrophil	Blood	Cell Line		Uni-ZAP XR
H0180	Human Primary Breast Cancer	Human Primary Breast Cancer	Breast		disease	Uni-ZAP XR
H0181	Human Primary Breast Cancer	Human Primary Breast Cancer	Breast		disease	Uni-ZAP XR
H0182	Human Primary Breast Cancer	Human Primary Breast Cancer	Breast		disease	Uni-ZAP XR
H0183	Human Colon Cancer	Human Colon Cancer	Colon		disease	Uni-ZAP XR
H0184	Human Colon Cancer, metastasized to live	Human Colon Cancer, metastasized to liver	Liver		disease	Lambda ZAP II
H0187	Resting T-Cell	T-Cells	Blood	Cell Line		Lambda ZAP II
H0188	Human Normal Breast	Human Normal Breast	Breast			Uni-ZAP XR
H0189	Human Resting	Human	Blood	Cell Line		Uni-ZAP XR

	Macrophage	Macrophage/Monocytes		Cell Line		
H0190	Human Activated Macrophage (LPS)	Human Macrophage/Monocytes	Blood			Uni-ZAP XR
H0192	Cem Cells, cyclohexamide treated, subtra	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line		Uni-ZAP XR
H0194	Human Cerebellum, subtracted	Human Cerebellum	Brain			pBluescript
H0196	Human Cardiomyopathy, subtracted	Human Cardiomyopathy	Heart			Uni-ZAP XR
H0197	Human Fetal Liver, subtracted	Human Fetal Liver	Liver			Uni-ZAP XR
H0199	Human Fetal Liver, subtracted, neg clone	Human Fetal Liver	Liver			Uni-ZAP XR
H0200	Human Greater Omentum, fract II remake,	Human Greater Omentum	peritoneum			Uni-ZAP XR
H0201	Human Hippocampus, subtracted	Human Hippocampus	Brain			pBluescript
H0202	Jurkat Cells, cyclohexamide treated, subtraction	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line		Uni-ZAP XR
H0204	Human Colon Cancer, subtracted	Human Colon Cancer	Colon			pBluescript
H0205	Human Colon Cancer, differential	Human Colon Cancer	Colon			pBluescript
H0207	LNCAP, differential expression	LNCAP Cell Line	Prostate	Cell Line		pBluescript
H0208	Early Stage Human Lung, subtracted	Human Fetal Lung	Lung			pBluescript
H0209	Human Cerebellum, differentially expressed	Human Cerebellum	Brain			Uni-ZAP XR
H0211	Human	Human Prostate	Prostate			pBluescript

	Prostate, differential expression						
H0212	Human Prostate, subtracted	Human Prostate	Prostate				pBluescript
H0213	Human Pituitary, subtracted	Human Pituitary					Uni-ZAP XR
H0214	Raji cells, cyclohexamide treated, subtracted	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line			pBluescript
H0215	Raji cells, cyclohexamide treated, differentially expressed	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line			pBluescript
H0216	Supt cells, cyclohexamide treated, subtracted	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line			pBluescript
H0217	Supt cells, cyclohexamide treated, differentially expressed	Cyclohexamide Treated Cem, Jurkat, Raji, and Supt	Blood	Cell Line			pBluescript
H0218	Activated T-Cells, 0hrs, subtracted	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0219	Activated T-Cells, 0hrs, differentially expressed	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0220	Activated T-Cells, 4 hrs, subtracted	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0222	Activated T-Cells, 8 hrs, subtracted	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0223	Activated T-Cells, 8 hrs, differentially expressed	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0224	Activated T-Cells, 12 hrs, subtracted	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0225	Activated T-Cells, 12hrs, differentially expressed	Activated T-Cells	Blood	Cell Line			Uni-ZAP XR
H0229	Early Stage Human	Early Stage Human Brain	Brain				Lambda ZAP II

	Brain, random primed							
H0230	Human Cardiomyopathy, diff exp	Human Cardiomyopathy	Heart			disease		Uni-ZAP XR
H0231	Human Colon, subtraction	Human Colon						pBluescript
H0232	Human Colon, differential expression	Human Colon						pBluescript
H0234	human colon cancer, metastatic to liver, differentially expressed	Human Colon Cancer, metastaticized to liver	Liver					pBluescript
H0235	Human colon cancer, metastaticized to liver, subtraction	Human Colon Cancer, metastaticized to liver	Liver					pBluescript
H0239	Human Kidney Tumor	Human Kidney Tumor	Kidney			disease		Uni-ZAP XR
H0240	C7MCF7 cell line, estrogen treated, Differential	C7MCF7 Cell Line, estrogen treated	Breast		Cell Line			Uni-ZAP XR
H0241	C7MCF7 cell line, estrogen treated, subtraction	C7MCF7 Cell Line, estrogen treated	Breast		Cell Line			Uni-ZAP XR
H0242	Human Fetal Heart, Differential (Fetal-Specific)	Human Fetal Heart	Heart					pBluescript
H0244	Human 8 Week Whole Embryo, subtracted	Human 8 Week Old Embryo	Embryo					Uni-ZAP XR
H0246	Human Fetal Liver-Enzyme subtraction	Human Fetal Liver	Liver					Uni-ZAP XR
H0247	Human Membrane Bound Polysomes-Enzyme Subtraction	Human Membrane Bound Polysomes	Blood		Cell Line			Uni-ZAP XR
H0249	HE7, subtracted by hybridization with E7 cDNA	Human Whole 7 Week Old Embryo	Embryo					Uni-ZAP XR

H0250	Human Activated Monocytes	Human Monocytes					Uni-ZAP XR
H0251	Human Chondrosarcoma	Human Chondrosarcoma	Cartilage		disease		Uni-ZAP XR
H0252	Human Osteosarcoma	Human Osteosarcoma	Bone		disease		Uni-ZAP XR
H0253	Human adult testis, large inserts	Human Adult Testis	Testis				Uni-ZAP XR
H0254	Breast Lymph node cDNA library	Breast Lymph Node	Lymph Node				Uni-ZAP XR
H0255	breast lymph node CDNA library	Breast Lymph Node	Lymph Node				Lambda ZAP II
H0256	HL-60, unstimulated	Human HL-60 Cells, unstimulated	Blood	Cell Line			Uni-ZAP XR
H0257	HL-60, PMA 4H	HL-60 Cells, PMA stimulated 4H	Blood	Cell Line			Uni-ZAP XR
H0261	H. cerebellum, Enzyme subtracted	Human Cerebellum	Brain				Uni-ZAP XR
H0263	human colon cancer	Human Colon Cancer	Colon		disease		Lambda ZAP II
H0264	human tonsils	Human Tonsil	Tonsil				Uni-ZAP XR
H0265	Activated T-Cell (12hs)/Thiouridine labelledEco	T-Cells	Blood	Cell Line			Uni-ZAP XR
H0266	Human Microvascular Endothelial Cells, fract. A	HMEC	Vein	Cell Line			Lambda ZAP II
H0267	Human Microvascular Endothelial Cells, fract. B	HMEC	Vein	Cell Line			Lambda ZAP II
H0268	Human Umbilical Vein Endothelial Cells, fract. A	HUVE Cells	Umbilical vein	Cell Line			Lambda ZAP II
H0269	Human Umbilical Vein Endothelial Cells, fract. B	HUVE Cells	Umbilical vein	Cell Line			Lambda ZAP II

H0270	HPAS (human pancreas, subtracted)	Human Pancreas	Pancreas			Uni-ZAP XR
H0271	Human Neutrophil, Activated	Human Neutrophil - Activated	Blood	Cell Line		Uni-ZAP XR
H0272	HUMAN TONSILS, FRACTION 2	Human Tonsil	Tonsil			Uni-ZAP XR
H0274	Human Adult Spleen, fractionII	Human Adult Spleen	Spleen			Uni-ZAP XR
H0275	Human Infant Adrenal Gland, Subtracted	Human Infant Adrenal Gland	Adrenal gland			pBluescript
H0280	K562 + PMA (36 hrs)	K562 Cell line	cell line	Cell Line		ZAP Express
H0281	Lymph node, abnorm. cell line (ATCC #7225)	Lymph Node, abnormal cell line	Lymph Node	Cell Line		ZAP Express
H0282	HBGB's differential consolidation	Human Primary Breast Cancer	Breast			Uni-ZAP XR
H0284	Human OB MG63 control fraction I	Human Osteoblastoma MG63 cell line	Bone	Cell Line		Uni-ZAP XR
H0286	Human OB MG63 treated (10 nM E2) fraction I	Human Osteoblastoma MG63 cell line	Bone	Cell Line		Uni-ZAP XR
H0288	Human OB HOS control fraction I	Human Osteoblastoma HOS cell line	Bone	Cell Line		Uni-ZAP XR
H0290	Human OB HOS treated (1 nM E2) fraction I	Human Osteoblastoma HOS cell line	Bone	Cell Line		Uni-ZAP XR
H0292	Human OB HOS treated (10 nM E2) fraction I	Human Osteoblastoma HOS cell line	Bone	Cell Line		Uni-ZAP XR
H0293	W1 38 cells					Uni-ZAP XR
H0294	Amniotic Cells - TNF induced	Amniotic Cells - TNF induced	Placenta	Cell Line		Uni-ZAP XR
H0295	Amniotic Cells - Primary Culture	Amniotic Cells - Primary Culture	Placenta	Cell Line		Uni-ZAP XR
H0300	CD34 positive cells (Cord Blood)	CD34 Positive Cells	Cord Blood			ZAP Express

H0305	CD34 positive cells (Cord Blood)	CD34 Positive Cells	Cord Blood			ZAP Express
H0306	CD34 depleted Buffy Coat (Cord Blood)	CD34 Depleted Buffy Coat (Cord Blood)	Cord Blood			ZAP Express
H0309	Human Chronic Synovitis	Synovium, Chronic Synovitis/ Osteoarthritis	Synovium		disease	Uni-ZAP XR
H0310	human caudate nucleus	Brain	Brain			Uni-ZAP XR
H0316	HUMAN STOMACH	Human Stomach	Stomach			Uni-ZAP XR
H0318	HUMAN B CELL LYMPHOMA	Human B Cell Lymphoma	Lymph Node		disease	Uni-ZAP XR
H0320	Human frontal cortex	Human Frontal Cortex	Brain			Uni-ZAP XR
H0321	HUMAN SCHWANOMA	Schwanoma	Nerve		disease	Uni-ZAP XR
H0327	human corpus colosum	Human Corpus Callosum	Brain			Uni-ZAP XR
H0328	human ovarian cancer	Ovarian Cancer	Ovary		disease	Uni-ZAP XR
H0329	Dermatofibrosarcoma Protuberance	Dermatofibrosarcoma Protuberans	Skin		disease	Uni-ZAP XR
H0331	Hepatocellular Tumor	Hepatocellular Tumor	Liver		disease	Lambda ZAP II
H0333	Hemangiopericytoma	Hemangiopericytoma	Blood vessel		disease	Lambda ZAP II
H0334	Kidney cancer	Kidney Cancer	Kidney		disease	Uni-ZAP XR
H0339	Duodenum	Duodenum				Uni-ZAP XR
H0341	Bone Marrow Cell Line (RS4;11)	Bone Marrow Cell Line RS4;11	Bone Marrow	Cell Line		Uni-ZAP XR
H0342	Lingual Gyrus	Lingual Gyrus	Brain			Uni-Zap XR
H0343	stomach cancer (human)	Stomach Cancer - 5383A (human)			disease	Uni-ZAP XR
H0344	Adipose tissue (human)	Adipose - 6825A (human)				Uni-ZAP XR
H0345	SKIN	Skin - 4000868H	Skin			Uni-ZAP XR
H0346	Brain-medulloblastoma	Brain (Medulloblastoma)- 9405C006R	Brain		disease	Uni-ZAP XR
H0349	human adult liver cDNA library	Human Adult Liver	Liver			pCMVSPORT 1
H0350	Human Fetal Liver,	Human Fetal Liver, mixed	Liver			Uni-ZAP XR

	mixed 10 & 14 week	10&14 Week					
H0351	Glioblastoma	Glioblastoma	Brain			disease	Uni-ZAP XR
H0352	wilm's tumor	Wilm's Tumor				disease	Uni-ZAP XR
H0354	Human Leukocytes	Human Leukocytes	Blood		Cell Line		pCMVSPORT 1
H0355	Human Liver	Human Liver, normal Adult					pCMVSPORT 1
H0356	Human Kidney	Human Kidney	Kidney				pCMVSPORT 1
H0357	H. Normalized Fetal Liver, II	Human Fetal Liver	Liver				Uni-ZAP XR
H0359	KMH2 cell line	KMH2					ZAP Express
H0360	Hemangiopericytoma	Hemangiopericytoma				disease	
H0361	Human rejected kidney	Human Rejected Kidney				disease	pBluescript
H0362	HeLa cell line	HELA CELL LINE					pSport I
H0366	L428 cell line	L428					ZAP Express
H0369	H. Atrophic Endometrium	Atrophic Endometrium and myometrium					Uni-ZAP XR
H0370	H. Lymph node breast Cancer	Lymph node with Met. Breast Cancer				disease	Uni-ZAP XR
H0372	Human Testes	Human Testes	Testis				pCMVSPORT 1
H0373	Human Heart	Human Adult Heart	Heart				pCMVSPORT 1
H0374	Human Brain	Human Brain					pCMVSPORT 1
H0375	Human Lung	Human Lung					pCMVSPORT 1
H0376	Human Spleen	Human Adult Spleen	Spleen				pCMVSPORT 1
H0379	Human Tongue, frac 1	Human Tongue					pSport I
H0380	Human Tongue, frac 2	Human Tongue					pSport I
H0381	Bone Cancer	Bone Cancer				disease	Uni-ZAP XR
H0383	Human Prostate BPH, re-excision	Human Prostate BPH					Uni-ZAP XR
H0384	Brain, Kozak	Human Brain					pCMVSPORT 1
H0386	Leukocyte and Lung; 4 screens	Human Leukocytes	Blood		Cell Line		pCMVSPORT 1
H0388	Human Rejected Kidney,	Human Rejected Kidney				disease	pBluescript

	704 re-excision					disease	pBluescript
H0390	Human Amygdala Depression, re-excision	Human Amygdala Depression					pBluescript
H0391	H. Meningima, M6	Human Meningima	brain				pSport1
H0392	H. Meningima, M1	Human Meningima	brain				pSport1
H0393	Fetal Liver, subtraction II	Human Fetal Liver	Liver				pBluescript
H0394	A-14 cell line	Redd-Sternberg cell					ZAP Express
H0395	A1-CELL LINE	Redd-Sternberg cell					ZAP Express
H0396	L1 Cell line	Redd-Sternberg cell					ZAP Express
H0399	Human Kidney Cortex, re-rescue	Human Kidney Cortex					Lambda ZAP II
H0400	Human Striatum Depression, re-rescue	Human Brain, Striatum Depression	Brain				Lambda ZAP II
H0402	CD34 depleted Buffy Coat (Cord Blood), re-excision	CD34 Depleted Buffy Coat (Cord Blood)	Cord Blood				ZAP Express
H0403	H. Umbilical Vein Endothelial Cells, IL4 induced	HUVE Cells	Umbilical vein		Cell Line		Uni-ZAP XR
H0404	H. Umbilical Vein endothelial cells, uninduced	HUVE Cells	Umbilical vein		Cell Line		Uni-ZAP XR
H0405	Human Pituitary, subtracted VI	Human Pituitary					pBluescript
H0406	H Amygdala Depression, subtracted	Human Amygdala Depression					Uni-ZAP XR
H0408	Human kidney Cortex, subtracted	Human Kidney Cortex					pBluescript
H0409	H. Striatum Depression, subtracted	Human Brain, Striatum Depression	Brain				pBluescript
H0410	H. Male bladder, adult	H Male Bladder, Adult	Bladder				pSport1
H0411	H Female Bladder, Adult	Human Female Adult Bladder	Bladder				pSport1

H0412	Human umbilical vein endothelial cells, IL-4 induced	HUVE Cells	Umbilical vein	Cell Line		pSport1
H0413	Human Umbilical Vein Endothelial Cells, uninduced	HUVE Cells	Umbilical vein	Cell Line		pSport1
H0414	Ovarian Tumor I, OV5232	Ovarian Tumor, OV5232	Ovary		disease	pSport1
H0415	H. Ovarian Tumor, II, OV5232	Ovarian Tumor, OV5232	Ovary		disease	pCMV/Sport 2.0
H0416	Human Neutrophils, Activated, re-excision	Human Neutrophil - Activated	Blood	Cell Line		pBluescript
H0417	Human Pituitary, subtracted VIII	Human Pituitary				pBluescript
H0418	Human Pituitary, subtracted VII	Human Pituitary				pBluescript
H0419	Bone Cancer, re-excision	Bone Cancer				Uni-ZAP XR
H0421	Human Bone Marrow, re-excision	Bone Marrow				pBluescript
H0422	T-Cell PHA 16 hrs	T-Cells	Blood	Cell Line		pSport1
H0423	T-Cell PHA 24 hrs	T-Cells	Blood	Cell Line		pSport1
H0424	Human Pituitary, subt IX	Human Pituitary				pBluescript
H0427	Human Adipose	Human Adipose, left hip				pSport1
H0428	Human Ovary	Human Ovary Tumor	Ovary			pSport1
H0429	K562 + PMA (36 hrs), re-excision	K562 Cell line	cell line	Cell Line		ZAP Express
H0431	H. Kidney Medulla, re-excision	Kidney medulla	Kidney			pBluescript
H0433	Human Umbilical Vein Endothelial cells, frac B, re-excision	HUVE Cells	Umbilical vein	Cell Line		pBluescript
H0434	Human Brain, striatum,	Human Brain, Striatum				pBluescript

	re-excision						
H0435	Ovarian Tumor 10-3-95	Ovarian Tumor, OV350721	Ovary				pCMVSPORT 2.0
H0436	Resting T-Cell Library, II	T-Cells	Blood	Cell Line			pSport I
H0437	H Umbilical Vein Endothelial Cells, frac A, re-excision	HUVE Cells	Umbilical vein	Cell Line			Lambda ZAP II
H0438	H. Whole Brain #2, re-excision	Human Whole Brain #2					ZAP Express
H0439	Human Eosinophils	Eosinophils					pBluescript
H0441	H. Kidney Cortex, subtracted	Kidney cortex	Kidney				pBluescript
H0443	H. Adipose, subtracted	Human Adipose, left hiplipoma					pSport I
H0444	Spleen metastatic melanoma	Spleen, Metastatic malignant melanoma	Spleen		disease		pSport I
H0445	Spleen, Chronic lymphocytic leukemia	Human Spleen, CLL	Spleen		disease		pSport I
H0449	CD34+ cell, I	CD34 positive cells					pSport I
H0455	H. Striatum Depression, subt	Human Brain, Striatum Depression	Brain				pBluescript
H0457	Human Eosinophils	Human Eosinophils					pSport I
H0458	CD34+ cell, I, frac II	CD34 positive cells					pSport I
H0459	CD34+cells, II, FRACTION 2	CD34 positive cells					pCMVSPORT 2.0
H0461	H. Kidney Medulla, subtracted	Kidney medulla	Kidney				pBluescript
H0462	H. Amygdala Depression, subtracted		Brain				pBluescript
H0477	Human Tonsil, Lib 3	Human Tonsil	Tonsil				pSport I
H0478	Salivary Gland, Lib 2	Human Salivary Gland	Salivary gland				pSport I
H0479	Salivary Gland, Lib 3	Human Salivary Gland	Salivary gland				pSport I
H0483	Breast Cancer cell line,	Breast Cancer Cell line,					pSport I

	MDA 36	MDA 36					
H0484	Breast Cancer Cell line, angiogenic	Breast Cancer Cell line, Angiogenic, 36T3					pSport1
H0485	Hodgkin's Lymphoma I	Hodgkin's Lymphoma I				disease	pCMV Sport 2.0
H0486	Hodgkin's Lymphoma II	Hodgkin's Lymphoma II				disease	pCMV Sport 2.0
H0487	Human Tonsils, lib 1	Human Tonsils					pCMV Sport 2.0
H0488	Human Tonsils, Lib 2	Human Tonsils					pCMV Sport 2.0
H0489	Crohn's Disease	Ileum	Intestine			disease	pSport1
H0490	HL-60, untreated, subtracted	Human HL-60 Cells, unstimulated	Blood		Cell Line		Uni-ZAP XR
H0491	HL-60, PMA 4H, subtracted	HL-60 Cells, PMA stimulated 4H	Blood		Cell Line		Uni-ZAP XR
H0492	HL-60, RA 4h, Subtracted	HL-60 Cells, RA stimulated for 4H	Blood		Cell Line		Uni-ZAP XR
H0494	Keratinocyte	Keratinocyte					pCMV Sport 2.0
H0497	HEL cell line	HEL cell line			HEL 92.1.7		pSport1
H0505	Human Astrocyte	Human Astrocyte					pSport1
H0506	Ulcerative Colitis	Colon	Colon				pSport1
H0509	Liver, Hepatoma	Human Liver, Hepatoma, patient 8	Liver			disease	pCMV Sport 3.0
H0510	Human Liver, normal	Human Liver, normal, Patient # 8	Liver				pCMV Sport 3.0
H0512	Keratinocyte, lib 3	Keratinocyte					pCMV Sport 2.0
H0518	pBMC stimulated w/ poly I/C	pBMC stimulated with poly I/C					pCMV Sport 3.0
H0519	NTera2, control	NTera2, Teratocarcinoma cell line					pCMV Sport 3.0
H0520	NTera2 + retinoic acid, 14 days	NTera2, Teratocarcinoma cell line					pSport1
H0521	Primary Dendritic Cells, lib 1	Primary Dendritic cells					pCMV Sport 3.0
H0522	Primary Dendritic cells, frac 2	Primary Dendritic cells					pCMV Sport 3.0

H0525	PCR, pBMC I/C treated	pBMC stimulated with poly I/C					PCRII
H0528	Poly[I]/Poly[C] Normal Lung Fibroblasts	Poly[I]/Poly[C] Normal Lung Fibroblasts					pCMV Sport 3.0
H0529	Myeloid Progenitor Cell Line	TF-1 Cell Line; Myeloid progenitor cell line					pCMV Sport 3.0
H0530	Human Dermal Endothelial Cells, untreated	Human Dermal Endothelial Cells; untreated					pSport1
H0538	Merkel Cells	Merkel cells			Lymph node		pSport1
H0539	Pancreas Islet Cell Tumor	Pancreas Islet Cell Tumor			Pancreas	disease	pSport1
H0540	Skin, burned	Skin, leg burned			Skin		pSport1
H0542	T Cell helper I	Helper T cell					pCMV Sport 3.0
H0543	T cell helper II	Helper T cell					pCMV Sport 3.0
H0544	Human endometrial stromal cells	Human endometrial stromal cells					pCMV Sport 3.0
H0545	Human endometrial stromal cells-treated with progesterone	Human endometrial stromal cells-treated with proge					pCMV Sport 3.0
H0546	Human endometrial stromal cells-treated with estradiol	Human endometrial stromal cells-treated with estro					pCMV Sport 3.0
H0547	NTERA2 teratocarcinoma cell line+retinoic acid (14 days)	NTERA2, Teratocarcinoma cell line					pSport1
H0549	H. Epididymus, caput & corpus	Human Epididymus, caput and corpus					Uni-ZAP XR
H0550	H. Epididymus, cauda	Human Epididymus, cauda					Uni-ZAP XR
H0551	Human Thymus Stromal Cells	Human Thymus Stromal Cells					pCMV Sport 3.0

H0553	Human Placenta	Human Placenta						pCMV'Sport 3.0
H0555	Rejected Kidney, lib 4	Human Rejected Kidney	Kidney				disease	pCMV'Sport 3.0
H0556	Activated T-cell(12h)/Thiouridine-re-excision	T-Cells	Blood			Cell Line		Uni-ZAP XR
H0559	HL-60, PMA 4H, re-excision	HL-60 Cells, PMA stimulated 4H	Blood			Cell Line		Uni-ZAP XR
H0560	KMH2	KMH2						pCMV'Sport 3.0
H0561	L428	L428						pCMV'Sport 3.0
H0562	Human Fetal Brain, normalized c5-11-26	Human Fetal Brain						pCMV'Sport 2.0
H0563	Human Fetal Brain, normalized 50021F	Human Fetal Brain						pCMV'Sport 2.0
H0564	Human Fetal Brain, normalized C5001F	Human Fetal Brain						pCMV'Sport 2.0
H0566	Human Fetal Brain,normalized c50F	Human Fetal Brain						pCMV'Sport 2.0
H0567	Human Fetal Brain, normalized A5002F	Human Fetal Brain						pCMV'Sport 2.0
H0569	Human Fetal Brain, normalized CO	Human Fetal Brain						pCMV'Sport 2.0
H0570	Human Fetal Brain, normalized C500H	Human Fetal Brain						pCMV'Sport 2.0
H0571	Human Fetal Brain, normalized C500HE	Human Fetal Brain						pCMV'Sport 2.0
H0572	Human Fetal Brain, normalized AC5002	Human Fetal Brain						pCMV'Sport 2.0
H0574	Hepatocellular Tumor; re-excision	Hepatocellular Tumor	Liver				disease	Lambda ZAP II
H0575	Human Adult Pulmonary;re-excision	Human Adult Pulmonary	Lung					Uni-ZAP XR
H0576	Resting T-Cell; re-excision	T-Cells	Blood			Cell Line		Lambda ZAP II

H0580	Dendritic cells, pooled	Pooled dendritic cells				pCMVSport 3.0
H0581	Human Bone Marrow, treated	Human Bone Marrow	Bone Marrow			pCMVSport 3.0
H0583	B Cell lymphoma	B Cell Lymphoma	B Cell		disease	pCMVSport 3.0
H0584	Activated T-cells, 24 hrs, re-excision	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0585	Activated T-Cells, 12 hrs, re-excision	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0586	Healing groin wound, 6.5 hours post incision	healing groin wound, 6.5 hours post incision - 2/	groin		disease	pCMVSport 3.0
H0587	Healing groin wound; 7.5 hours post incision	Groin-2/19/97	groin		disease	pCMVSport 3.0
H0589	CD34 positive cells (cord blood), re-ex	CD34 Positive Cells	Cord Blood			ZAP Express
H0590	Human adult small intestine, re-excision	Human Adult Small Intestine	Small Int.			Uni-ZAP XR
H0591	Human T-cell lymphoma; re-excision	T-Cell Lymphoma	T-Cell		disease	Uni-ZAP XR
H0592	Healing groin wound - zero hr post-incision (control)	HGS wound healing project; abdomen			disease	pCMVSport 3.0
H0593	Olfactory epithelium; nasalcavity	Olfactory epithelium from roof of left nasal cavity				pCMVSport 3.0
H0594	Human Lung Cancer; re-excision	Human Lung Cancer	Lung		disease	Lambda ZAP II
H0595	Stomach cancer (human); re-excision	Stomach Cancer - 5383A (human)			disease	Uni-ZAP XR
H0596	Human Colon Cancer; re-excision	Human Colon Cancer	Colon			Lambda ZAP II
H0597	Human Colon; re-excision	Human Colon				Lambda ZAP II
H0598	Human Stomach; re-excision	Human Stomach	Stomach			Uni-ZAP XR

H0599	Human Adult Heart; re-excision	Human Adult Heart	Heart			Uni-ZAP XR
H0600	Healing Abdomen wound; 70&90 min post incision	Abdomen			disease	pCMV Sport 3.0
H0601	Healing Abdomen Wound; 15 days post incision	Abdomen			disease	pCMV Sport 3.0
H0602	Healing Abdomen Wound; 21&29 days post incision	Abdomen			disease	pCMV Sport 3.0
H0604	Human Pituitary, re-excision	Human Pituitary				pBluescript
H0606	Human Primary Breast Cancer; re-excision	Human Primary Breast Cancer	Breast		disease	Uni-ZAP XR
H0607	H. Leukocytes, normalized cot 50A3	H. Leukocytes				pCMV Sport 1
H0609	H. Leukocytes, normalized cot > 500A	H. Leukocytes				pCMV Sport 1
H0611	H. Leukocytes, normalized cot 500 B	H. Leukocytes				pCMV Sport 1
H0613	H. Leukocytes, normalized cot 5B	H. Leukocytes				pCMV Sport 1
H0614	H. Leukocytes, normalized cot 500 A	H. Leukocytes				pCMV Sport 1
H0615	Human Ovarian Cancer Reexcision	Ovarian Cancer	Ovary		disease	Uni-ZAP XR
H0616	Human Testes, Reexcision	Human Testes	Testis			Uni-ZAP XR
H0617	Human Primary Breast Cancer Reexcision	Human Primary Breast Cancer	Breast		disease	Uni-ZAP XR
H0618	Human Adult Testes, Large Inserts, Reexcision	Human Adult Testis	Testis			Uni-ZAP XR

H0619	Fetal Heart	Human Fetal Heart	Heart			Uni-ZAP XR
H0620	Human Fetal Kidney; Reexcision	Human Fetal Kidney	Kidney			Uni-ZAP XR
H0622	Human Pancreas Tumor; Reexcision	Human Pancreas Tumor	Pancreas		disease	Uni-ZAP XR
H0623	Human Umbilical Vein; Reexcision	Human Umbilical Vein Endothelial Cells	Umbilical vein			Uni-ZAP XR
H0624	12 Week Early Stage Human II; Reexcision	Twelve Week Old Early Stage Human	Embryo			Uni-ZAP XR
H0625	Ku 812F Basophils Line	Ku 812F Basophils				pSport1
H0626	Saos2 Cells; Untreated	Saos2 Cell Line; Untreated				pSport1
H0627	Saos2 Cells; Vitamin D3 Treated	Saos2 Cell Line; Vitamin D3 Treated				pSport1
H0628	Human Pre-Differentiated Adipocytes	Human Pre-Differentiated Adipocytes				Uni-ZAP XR
H0629	Human Leukocyte, control #2	Human Normalized leukocyte				pCMV Sport 1
H0631	Saos2, Dexamethosone Treated	Saos2 Cell Line; Dexamethosone Treated				pSport1
H0632	Hepatocellular Tumor; re-excision	Hepatocellular Tumor	Liver			Lambda ZAP II
H0633	Lung Carcinoma A549 TNFalpha activated	TNFalpha activated A549-Lung Carcinoma			disease	pSport1
H0634	Human Testes Tumor, re-excision	Human Testes Tumor	Testis		disease	Uni-ZAP XR
H0635	Human Activated T-Cells, re-excision	Activated T-Cells	Blood	Cell Line		Uni-ZAP XR
H0637	Dendritic Cells From CD34 Cells	Dendritic cells from CD34 cells				pSport1
H0638	CD40 activated monocyte dendritic cells	CD40 activated monocyte dendritic cells				pSport1
H0640	Ficoll Human Stromal	Ficoll Human Stromal				Other

	Cells, Untreated	Cells, Untreated				
H0641	LPS activated derived dendritic cells	LPS activated monocyte derived dendritic cells				pSport1
H0642	Hep G2 Cells, lambda library	Hep G2 Cells				Other
H0643	Hep G2 Cells, PCR library	Hep G2 Cells				Other
H0644	Human Placenta (re-excision)	Human Placenta	Placenta			Uni-ZAP XR
H0645	Fetal Heart, re-excision	Human Fetal Heart	Heart			Uni-ZAP XR
H0646	Lung, Cancer (4005313 A3): Invasive Poorly Differentiated Lung Adenocarcinoma,	Metastatic squamous cell lung carcinoma, poorly di				pSport1
H0647	Lung, Cancer (4005163 B7): Invasive, Poorly Diff. Adenocarcinoma, Metastatic	Invasive poorly differentiated lung adenocarcinoma			disease	pSport1
H0648	Ovary, Cancer: (4004562 B6) Papillary Serous Cystic Neoplasm, Low Malignant Pot	Papillary Cstic neoplasm of low malignant potentia			disease	pSport1
H0649	Lung, Normal: (4005313 B1)	Normal Lung				pSport1
H0650	B-Cells	B-Cells				pCMV Sport 3.0
H0651	Ovary, Normal: (9805C040R)	Normal Ovary				pSport1
H0652	Lung, Normal: (4005313 B1)	Normal Lung				pSport1
H0653	Stromal Cells	Stromal Cells				pSport1
H0654	Lung, Cancer: (4005313 A3) Invasive Poorly-differentiated Metastatic	Metastatic Squamous cell lung Carcinoma poorly dif				Other

H0671	Breast, Cancer: (9802C02OE)	Breast Cancer- Sample # 9802C02OE				pSportI
H0672	Ovary, Cancer: (4004576A8)	Ovarian Cancer(4004576A8)	Ovary			pSportI
H0673	Human Prostate Cancer, Stage B2; re-excision	Human Prostate Cancer, stage B2	Prostate			Uni-ZAP XR
H0674	Human Prostate Cancer, Stage C; re-excision	Human Prostate Cancer, stage C	Prostate			Uni-ZAP XR
H0675	Colon, Cancer: (9808C064R)	Colon Cancer 9808C064R				pCMVSport 3.0
H0676	Colon, Cancer: (9808C064R)-total RNA	Colon Cancer 9808C064R				pCMVSport 3.0
H0677	TNFR degenerate oligo	B-Cells				PCRII
H0678	screened clones from placental library	Placenta	Placenta			Other
H0682	Serous Papillary Adenocarcinoma	serous papillary adenocarcinoma (9606G304SPA3B)				pCMVSport 3.0
H0683	Ovarian Serous Papillary Adenocarcinoma	Serous papillary adenocarcinoma, stage 3C (9804G01)				pCMVSport 3.0
H0684	Serous Papillary Adenocarcinoma	Ovarian Cancer-9810G606	Ovaries			pCMVSport 3.0
H0685	Adenocarcinoma of Ovary, Human Cell Line, # OVCAR-3	Adenocarcinoma of Ovary, Human Cell Line, # OVCAR-				pCMVSport 3.0
H0686	Adenocarcinoma of Ovary, Human Cell Line	Adenocarcinoma of Ovary, Human Cell Line, # SW-626				pCMVSport 3.0
H0687	Human normal ovary(#9610G215)	Human normal ovary(#9610G215)	Ovary			pCMVSport 3.0
H0688	Human Ovarian Cancer(#9807G017)	Human Ovarian cancer(#9807G017),mRN				pCMVSport 3.0

H0689	Ovarian Cancer	A from Maura Ru					pCMV Sport 3.0
H0690	Ovarian Cancer, #9702G001	Ovarian Cancer, #9806G019					pCMV Sport 3.0
H0691	Normal Ovary, #9710G208	normal ovary, #9710G208					pCMV Sport 3.0
H0693	Normal Prostate #ODQ3958EN	Normal Prostate Tissue #ODQ3958EN					pCMV Sport 3.0
H0694	Prostate gland adenocarcinoma	Prostate gland, adenocarcinoma, mod/diff, gleason	prostate gland				pCMV Sport 3.0
H0695	mononucleocytes from patient	mononucleocytes from patient at Shady Grove Hospit					pCMV Sport 3.0
N0003	Human Fetal Brain	Human Fetal Brain					
N0006	Human Fetal Brain	Human Fetal Brain					
N0007	Human Hippocampus	Human Hippocampus					
N0009	Human Hippocampus, prescreened	Human Hippocampus					
S0001	Brain frontal cortex	Brain frontal cortex	Brain				Lambda ZAP II
S0002	Monocyte activated	Monocyte-activated	blood	Cell Line			Uni-ZAP XR
S0003	Human Osteoclastoma	Osteoclastoma	bone		disease		Uni-ZAP XR
S0004	Prostate	Prostate BPH	Prostate				Lambda ZAP II
S0005	Heart	Heart-left ventricle	Heart				pCDNA
S0006	Neuroblastoma	Human Neural Blastoma			disease		pCDNA
S0007	Early Stage Human Brain	Human Fetal Brain					Uni-ZAP XR
S0010	Human Amygdala	Amygdala					Uni-ZAP XR
S0011	STROMAL - OSTEOCLASTOMA	Osteoclastoma	bone		disease		Uni-ZAP XR
S0013	Prostate	Prostate	prostate				Uni-ZAP XR
S0014	Kidney Cortex	Kidney cortex	Kidney				Uni-ZAP XR
S0015	Kidney medulla	Kidney medulla	Kidney				Uni-ZAP XR

S0016	Kidney Pyramids	Kidney pyramids	Kidney			Uni-ZAP XR
S0021	Whole brain	Whole brain	Brain			ZAP Express
S0022	Human Osteoclastoma Stromal Cells - unamplified	Osteoclastoma Stromal Cells				Uni-ZAP XR
S0024	Human Kidney Medulla - unamplified	Human Kidney Medulla				
S0026	Stromal cell TF274	stromal cell	Bone marrow	Cell Line		Uni-ZAP XR
S0027	Smooth muscle, serum treated	Smooth muscle	Pulmonary artery	Cell Line		Uni-ZAP XR
S0028	Smooth muscle, control	Smooth muscle	Pulmonary artery	Cell Line		Uni-ZAP XR
S0029	brain stem	Brain stem	brain			Uni-ZAP XR
S0030	Brain pons	Brain Pons	Brain			Uni-ZAP XR
S0031	Spinal cord	Spinal cord	spinal cord			Uni-ZAP XR
S0032	Smooth muscle-IL1b induced	Smooth muscle	Pulmonary artery	Cell Line		Uni-ZAP XR
S0035	Brain medulla oblongata	Brain medulla oblongata	Brain			Uni-ZAP XR
S0036	Human Substantia Nigra	Human Substantia Nigra				Uni-ZAP XR
S0037	Smooth muscle, IL1b induced	Smooth muscle	Pulmonary artery	Cell Line		Uni-ZAP XR
S0038	Human Whole Brain #2 - Oligo dT > 1.5Kb	Human Whole Brain #2				ZAP Express
S0039	Hypothalamus	Hypothalamus	Brain			Uni-ZAP XR
S0040	Adipocytes	Human Adipocytes from Osteoclastoma				Uni-ZAP XR
S0042	Testes	Human Testes				ZAP Express
S0044	Prostate BPH	prostate BPH	Prostate		disease	Uni-ZAP XR
S0045	Endothelial cells-control	Endothelial cell	endothelial cell-lung	Cell Line		Uni-ZAP XR
S0046	Endothelial-induced	Endothelial cell	endothelial cell-lung	Cell Line		Uni-ZAP XR
S0048	Human Hypothalamus, Alzheimer's	Human Hypothalamus, Alzheimer's			disease	Uni-ZAP XR

S0049	Human Brain, Striatum	Human Brain, Striatum					Uni-ZAP XR
S0050	Human Frontal Cortex, Schizophrenia	Human Frontal Cortex, Schizophrenia				disease	Uni-ZAP XR
S0051	Human Hypothalamus, Schizophrenia	Human Hypothalamus, Schizophrenia				disease	Uni-ZAP XR
S0052	neutrophils control	human neutrophils			blood	Cell Line	Uni-ZAP XR
S0053	Neutrophils IL-1 and LPS induced	human neutrophil induced			blood	Cell Line	Uni-ZAP XR
S0106	STRIATUM DEPRESSION				BRAIN		Uni-ZAP XR
S0110	Brain Amygdala Depression				Brain		Uni-ZAP XR
S0112	Hypothalamus				Brain		Uni-ZAP XR
S0114	Anergic T-cell	Anergic T-cell				Cell Line	Uni-ZAP XR
S0116	Bone marrow	Bone marrow			Bone marrow		Uni-ZAP XR
S0122	Osteoclastoma-normalized A	Osteoclastoma			bone		pBluescript
S0124	Smooth muscle-edited A	Smooth muscle			Pulmonary artery	Cell Line	Uni-ZAP XR
S0126	Osteoblasts	Osteoblasts			Knee	Cell Line	Uni-ZAP XR
S0132	Epithelial-TNF α and INF induced	Airway Epithelial					Uni-ZAP XR
S0134	Apoptotic T-cell	apoptotic cells				Cell Line	Uni-ZAP XR
S0136	PERM TF274	stromal cell			Bone marrow	Cell Line	Lambda ZAP II
S0140	eosinophil-IL5 induced	eosinophil			lung	Cell Line	Uni-ZAP XR
S0142	Macrophage-oxLDL	macrophage-oxidized LDL treated			blood	Cell Line	Uni-ZAP XR
S0144	Macrophage (GM-CSF treated)	Macrophage (GM-CSF treated)					Uni-ZAP XR
S0146	prostate-edited	prostate BPH			Prostate		Uni-ZAP XR
S0148	Normal Prostate	Prostate			prostate		Uni-ZAP XR
S0150	LNCAP prostate cell line	LNCAP Cell Line			Prostate	Cell Line	Uni-ZAP XR
S0152	PC3 Prostate cell line	PC3 prostate cell line					Uni-ZAP XR

S0168	Prostate/LNCAP, subtraction I	PC3 prostate cell line				pBluescript
S0176	Prostate, normal, subtraction I	Prostate	prostate			Uni-ZAP XR
S0180	Bone Marrow Stroma, TNF&LPS ind	Bone Marrow Stroma, TNF & LPS induced			disease	Uni-ZAP XR
S0182	Human B Cell 8866	Human B- Cell 8866				Uni-ZAP XR
S0188	Prostate, BPH, Lib 2	Human Prostate BPH			disease	pSport1
S0190	Prostate BPH, Lib 2, subtracted	Human Prostate BPH				pSport1
S0192	Synovial Fibroblasts (control)	Synovial Fibroblasts				pSport1
S0194	Synovial hypoxia	Synovial Fibroblasts				pSport1
S0196	Synovial IL-1/TNF stimulated	Synovial Fibroblasts				pSport1
S0206	Smooth Muscle- HASTE normalized	Smooth muscle	Pulmonary artery	Cell Line		pBluescript
S0208	Mesangial cell, frac 1	Mesangial cell				pSport1
S0210	Mesangial cell, frac 2	Mesangial cell				pSport1
S0212	Bone Marrow Stromal Cell, untreated	Bone Marrow Stromal Cell, untreated				pSport1
S0214	Human Osteoclastoma, re-excision	Osteoclastoma	bone		disease	Uni-ZAP XR
S0216	Neutrophils IL-1 and LPS induced	human neutrophil induced	blood	Cell Line		Uni-ZAP XR
S0218	Apoptotic T-cell, re-excision	apoptotic cells		Cell Line		Uni-ZAP XR
S0220	H. hypothalamus, frac A; re-excision	Hypothalamus	Brain			ZAP Express
S0222	H. Frontal cortex, epileptic; re-excision	H. Brain, Frontal Cortex, Epileptic	Brain		disease	Uni-ZAP XR
S0242	Synovial Fibroblasts	Synovial Fibroblasts				pSport1

	(III/TNF), sub						
S0250	Human Osteoblasts II	Human Osteoblasts	Femur				pCMV Sport 2.0
S0260	Spinal Cord, re-excision	Spinal cord	spinal cord			disease	Uni-ZAP XR
S0276	Synovial hypoxia-RSF subtracted	Synovial fobroblasts (rheumatoid)	Synovial tissue				pSport1
S0278	H Macrophage (GM-CSF treated), re-excision	Macrophage (GM-CSF treated)					Uni-ZAP XR
S0280	Human Adipose Tissue, re-excision	Human Adipose Tissue					Uni-ZAP XR
S0282	Brain Frontal Cortex, re-excision	Brain frontal cortex	Brain				Lambda ZAP II
S0292	Osteoarthritis (OA-4)	Human Osteoarthritic Cartilage	Bone			disease	pSport1
S0294	Larynx tumor	Larynx tumor	Larynx, vocal cord			disease	pSport1
S0298	Bone marrow stroma, treated	Bone marrow stroma, treated SB	Bone marrow				pSport1
S0300	Frontal lobe, dementia; re-excision	Frontal Lobe dementia/Alzheimer's	Brain				Uni-ZAP XR
S0306	Larynx normal #10 261-273	Larynx normal					pSport1
S0308	Spleen/normal	Spleen normal					pSport1
S0310	Normal trachea	Normal trachea					pSport1
S0312	Human osteoarthritic; fraction II	Human osteoarthritic cartilage				disease	pSport1
S0314	Human osteoarthritic; fraction I	Human osteoarthritic cartilage				disease	pSport1
S0316	Human Normal Cartilage, Fraction I	Human Normal Cartilage					pSport1
S0318	Human Normal Cartilage Fraction II	Human Normal Cartilage					pSport1
S0328	Palate carcinoma	Palate carcinoma	Uvula			disease	pSport1
S0330	Palate normal	Palate normal	Uvula				pSport1
S0332	Pharynx carcinoma	Pharynx carcinoma	Hypopharynx				pSport1

S0334	Human Normal Cartilage Fraction III	Human Normal Cartilage				pSportI
S0336	Human Normal Cartilage Fraction IV	Human Normal Cartilage				pSportI
S0338	Human Osteoarthritic Cartilage Fraction III	Human osteoarthritic cartilage			disease	pSportI
S0340	Human Osteoarthritic Cartilage Fraction IV	Human osteoarthritic cartilage			disease	pSportI
S0342	Adipocytes;re-excision	Human Adipocytes from Osteoclastoma				Uni-ZAP XR
S0344	Macrophage-oxLDL; re-excision	macrophage-oxidized LDL treated	blood		Cell Line	Uni-ZAP XR
S0346	Human Amygdala;re-excision	Amygdala				Uni-ZAP XR
S0348	Cheek Carcinoma	Cheek Carcinoma			disease	pSportI
S0350	Pharynx Carcinoma	Pharynx carcinoma	Hypopharynx		disease	pSportI
S0352	Larynx Carcinoma	Larynx carcinoma			disease	pSportI
S0354	Colon Normal II	Colon Normal	Colon			pSportI
S0356	Colon Carcinoma	Colon Carcinoma	Colon		disease	pSportI
S0358	Colon Normal III	Colon Normal	Colon			pSportI
S0360	Colon Tumor II	Colon Tumor	Colon		disease	pSportI
S0362	Human Gastrocnemius	Gastrocnemius muscle				pSportI
S0364	Human Quadriceps	Quadriceps muscle				pSportI
S0366	Human Soleus	Soleus Muscle				pSportI
S0368	Human Pancreatic Langerhans	Islets of Langerhans				pSportI
S0370	Larynx carcinoma II	Larynx carcinoma			disease	pSportI
S0372	Larynx carcinoma III	Larynx carcinoma			disease	pSportI
S0374	Normal colon	Normal colon				pSportI
S0376	Colon Tumor	Colon Tumor			disease	pSportI
S0378	Pancreas normal PCA4 No	Pancreas Normal PCA4 No				pSportI
S0380	Pancreas Tumor PCA4	Pancreas Tumor PCA4 Tu			disease	pSportI

	Tu						
S0382	Larynx carcinoma IV	Larynx carcinoma			disease		pSportl
S0384	Tongue carcinoma	Tongue carcinoma			disease		pSportl
S0386	Human Whole Brain, re-excision	Whole brain	Brain				ZAP Express
S0388	Human Hypothalamus, schizophrenia, re-excision	Human Hypothalamus, Schizophrenia			disease		Uni-ZAP XR
S0390	Smooth muscle, control; re-excision	Smooth muscle	Pulmonary artery	Cell Line			Uni-ZAP XR
S0392	Salivary Gland	Salivary gland; normal					pSportl
S0394	Stomach; normal	Stomach; normal					pSportl
S0398	Testis; normal	Testis; normal					pSportl
S0400	Brain; normal	Brain; normal					pSportl
S0402	Adrenal Gland, normal	Adrenal gland; normal					pSportl
S0404	Rectum normal	Rectum, normal					pSportl
S0406	Rectum tumour	Rectum tumour					pSportl
S0408	Colon, normal	Colon, normal					pSportl
S0410	Colon, tumour	Colon, tumour					pSportl
S0412	Temporal cortex-Alzheimer; subtraced	Temporal cortex, alzheimer			disease		Other
S0414	Hippocampus, Alzheimer Subtraced	Hippocampus, Alzheimer Subtraced					Other
S0418	CHME Cell Line; treated 5 hrs	CHME Cell Line; treated					pCMV Sport 3.0
S0420	CHME Cell Line, untreated	CHME Cell line, untreated					pSportl
S0422	Mo7e Cell Line GM-CSF treated (1ng/ml)	Mo7e Cell Line GM-CSF treated (1ng/ml)					pCMV Sport 3.0
S0424	TF-1 Cell Line GM-CSF Treated	TF-1 Cell Line GM-CSF Treated					pSportl
S0426	Monocyte activated; re-excision	Monocyte-activated	blood	Cell Line			Uni-ZAP XR

S0428	Neutrophils control; re-excision	human neutrophils	blood	Cell Line	Uni-ZAP XR
S0430	Aryepiglottis Normal	Aryepiglottis Normal			pSport1
S0432	Sinus piniformis Tumour	Sinus piniformis Tumour			pSport1
S0434	Stomach Normal	Stomach Normal		disease	pSport1
S0436	Stomach Tumour	Stomach Tumour		disease	pSport1
S0438	Liver Normal Met5No	Liver Normal Met5No			pSport1
S0440	Liver Tumour Met 5 Tu	Liver Tumour			pSport1
S0442	Colon Normal	Colon Normal			pSport1
S0444	Colon Tumor	Colon Tumour		disease	pSport1
S0446	Tongue Tumour	Tongue Tumour			pSport1
S0448	Larynx Normal	Larynx Normal			pSport1
S0450	Larynx Tumour	Larynx Tumour			pSport1
S0452	Thymus	Thymus			pSport1
S0454	Placenta	Placenta	Placenta		pSport1
S0456	Tongue Normal	Tongue Normal			pSport1
S0458	Thyroid Normal (SDCA2 No)	Thyroid normal			pSport1
S0460	Thyroid Tumour	Thyroid Tumour			pSport1
S0462	Thyroid Thyroiditis	Thyroid Thyroiditis			pSport1
S0464	Larynx Normal	Larynx Normal			pSport1
S0466	Larynx Tumor	Larynx Tumor		disease	pSport1
S0468	Ea.hy.926 cell line	Ea.hy.926 cell line			pSport1
S0470	Adenocarcinoma	PYFD		disease	pSport1
S0472	Lung Mesothelium	PYBT			pSport1
S0474	Human blood platelets	Platelets	Blood platelets		Other
S0665	Human Amygdala; re-excision	Amygdala			Uni-ZAP XR
S3012	Smooth Muscle Serum Treated, Norm	Smooth muscle	Pulmonary artery	Cell Line	pBluescript
S3014	Smooth muscle, serum induced, re-exc	Smooth muscle	Pulmonary artery	Cell Line	pBluescript

S6014	H. hypothalamus, frac A	Hypothalamus	Brain				ZAP Express
S6016	H. Frontal Cortex, Epileptic	H. Brain, Frontal Cortex, Epileptic	Brain			disease	Uni-ZAP XR
S6022	H. Adipose Tissue	Human Adipose Tissue					Uni-ZAP XR
S6024	Alzheimers, spongy change	Alzheimer's/Spongy change	Brain			disease	Uni-ZAP XR
S6026	Frontal Lobe, Dementia	Frontal Lobe dementia/Alzheimer's	Brain				Uni-ZAP XR
S6028	Human Manic Depression Tissue	Human Manic depression tissue	Brain			disease	Uni-ZAP XR
T0002	Activated T-cells	Activated T-Cell, PBL fraction	Blood		Cell Line		pBluescript SK-
T0003	Human Fetal Lung	Human Fetal Lung					pBluescript SK-
T0004	Human White Fat	Human White Fat					pBluescript SK-
T0006	Human Pineal Gland	Human Pineal Gland					pBluescript SK-
T0007	Colon Epithelium	Colon Epithelium					pBluescript SK-
T0008	Colorectal Tumor	Colorectal Tumor				disease	pBluescript SK-
T0010	Human Infant Brain	Human Infant Brain					Other
T0023	Human Pancreatic Carcinoma	Human Pancreatic Carcinoma				disease	pBluescript SK-
T0039	HSA 172 Cells	Human HSA 172 cell line					pBluescript SK-
T0040	HSC172 cells	SA172 Cells					pBluescript SK-
T0041	Jurkat T-cell G1 phase	Jurkat T-cell					pBluescript SK-
T0042	Jurkat T-Cell, S phase	Jurkat T-Cell Line					pBluescript SK-
T0048	Human Aortic Endothelium	Human Aortic Endothelium					pBluescript SK-
T0049	Aorta endothelial cells + TNF-a	Aorta endothelial cells					pBluescript SK-
T0060	Human White Adipose	Human White Fat					pBluescript SK-
T0067	Human Thyroid	Human Thyroid					pBluescript SK-
T0068	Normal Ovary, Premenopausal	Normal Ovary, Premenopausal					pBluescript SK-
T0069	Human Uterus, normal	Human Uterus, normal					pBluescript SK-

T0071	Human Bone Marrow	Human Bone Marrow					pBluescript SK-
T0079	Human Kidney, normal Adult	Human Kidney, normal Adult					pBluescript SK-
T0082	Human Adult Retina	Human Adult Retina					pBluescript SK-
T0086	Human Pancreatic Carcinoma -- Screened	Human Pancreatic Carcinoma				disease	pBluescript SK-
T0087	Alzheimer"s, exon trap, 712P					disease	pAMP
T0103	Human colon carcinoma (HCC) cell line						pBluescript SK-
T0104	HCC cell line metastasis to liver						pBluescript SK-
T0109	Human (HCC) cell line liver (mouse) metastasis, remake						pBluescript SK-
T0110	Human colon carcinoma (HCC) cell line, remake						pBluescript SK-
T0112	Human (Caco-2) cell line, adenocarcinoma, colon						pBluescript SK-
T0114	Human (Caco-2) cell line, adenocarcinoma, colon, remake						pBluescript SK-
T0115	Human Colon Carcinoma (HCC) cell line						pBluescript SK-
L0002	Atrium cDNA library Human heart						
L0005	Clontech human aorta polyA+ mRNA (#6572)						
L0015	Human						
L0021	Human adult (K.Okubo)						
L0022	Human adult lung 3" directed MboI cDNA						

L0024	Human brain ARSanders						
L0040	Human colon mucosa						
L0041	Human epidermal keratinocyte						
L0045	Human keratinocyte differential display (B.Lin)						
L0053	Human pancreatic tumor						
L0055	Human promyelocyte						
L0065	Liver HepG2 cell line.						
L0096	Subtracted human retina						
L0097	Subtracted human retinal pigment epithelium (RPE)						
L0103	DKFZphamy1				amygdala		
L0105	Human aorta polyA+ (TFujiwara)				aorta		
L0142	Human placenta cDNA (TFujiwara)				placenta		
L0143	Human placenta polyA+ (TFujiwara)				placenta		
L0151	Human testis (C. De Smet)				testis		
L0157	Human fetal brain (TFujiwara)					brain	
L0163	Human heart cDNA (YNakamura)					heart	
L0182	Human HeLa (Y.Wang)						HeLa
L0187	Human fibrosarcoma cell line HT1080				fibrosarcoma		HT1080
L0194	Human pancreatic cancer cell line Patu 8988t				pancreatic cancer		Patu 8988t
L0295	Human liver EST					liver	

	(Y.L. Yu)						
L0309	Human E8CASS	breast adenocarcinoma			E8CASS; variant of MCF7		
L0351	Infant brain, Bento Soares						BA, M13-derived
L0352	Normalized infant brain, Bento Soares						BA, M13-derived
L0355	P, Human foetal Brain Whole tissue						Bluescript
L0356	S, Human foetal Adrenals tissue						Bluescript
L0361	Stratagene ovary (#937217)		ovary				Bluescript SK
L0362	Stratagene ovarian cancer (#937219)						Bluescript SK-
L0363	NCI CGAP GC2	germ cell tumor					Bluescript SK-
L0364	NCI CGAP GC5	germ cell tumor					Bluescript SK-
L0365	NCI CGAP Phe1	pheochromocytoma					Bluescript SK-
L0366	Stratagene schizo brain S11	schizophrenic brain S-11 frontal lobe					Bluescript SK-
L0367	NCI CGAP Sch1	Schwannoma tumor					Bluescript SK-
L0368	NCI CGAP SS1	synovial sarcoma					Bluescript SK-
L0369	NCI CGAP AA1	adrenal adenoma	adrenal gland				Bluescript SK-
L0370	Johnston frontal cortex	pooled frontal lobe	brain				Bluescript SK-
L0371	NCI CGAP Br3	breast tumor	breast				Bluescript SK-
L0372	NCI CGAP Col2	colon tumor	colon				Bluescript SK-
L0373	NCI CGAP Col1	tumor	colon				Bluescript SK-
L0374	NCI CGAP Co2	tumor	colon				Bluescript SK-
L0375	NCI CGAP Kid6	kidney tumor	kidney				Bluescript SK-
L0376	NCI CGAP Lar1	larynx	larynx				Bluescript SK-
L0378	NCI CGAP Lu1	lung tumor	lung				Bluescript SK-
L0379	NCI CGAP_Lym3	lymphoma	lymph node				Bluescript SK-

L0381	NCI CGAP HN4	squamous cell carcinoma	pharynx		Bluescript SK-
L0382	NCI CGAP Pr25	epithelium (cell line)	prostate		Bluescript SK-
L0383	NCI CGAP Pr24	invasive tumor (cell line)	prostate		Bluescript SK-
L0384	NCI CGAP Pr23	prostate tumor	prostate		Bluescript SK-
L0385	NCI CGAP Gas1	gastric tumor	stomach		Bluescript SK-
L0386	NCI CGAP HN3	squamous cell carcinoma from base of tongue	tongue		Bluescript SK-
L0387	NCI CGAP GCB0	germinal center B-cells	tonsil		Bluescript SK-
L0388	NCI CGAP HN6	normal gingiva (cell line from immortalized kerati			Bluescript SK-
L0389	NCI CGAP HN5	normal gingiva (cell line from primary keratinocyt			Bluescript SK-
L0394	H, Human adult Brain Cortex tissue				gt11
L0404	b4HB3MA Cot109+103+85-Bio				Lafmid A
L0411	1-NIB				Lafmid BA
L0415	b4HB3MA Cot8-HAP-Ft				Lafmid BA
L0418	b4HB3MA-Cot109+10-Bio				Lafmid BA
L0428	Cot1374Ft-4HB3MA				Lafmid BA
L0435	Infant brain, LLNL array of Dr. M. Soares 1NIB				lafmid BA
L0438	normalized infant brain cDNA	total brain	brain		lafmid BA
L0439	Soares infant brain 1NIB		whole brain		Lafmid BA
L0446	N4HB3MK				Lafmid BK
L0455	Human retina cDNA randomly primed sublibrary	retina	eye		lambda gt10
L0456	Human retina cDNA Tsp5091-cleaved sublibrary	retina	eye		lambda gt10

L0457	multi-tissue normalized short-fragment	multi-tissue	pooled			lambda gt10
L0459	Adult heart, Clontech					Lambda gt11
L0460	Adult heart, Lambda gt11					Lambda gt11
L0462	WATM1					lambda gt11
L0463	fetal brain cDNA	brain	brain			lambda gt11
L0465	TEST1, Human adult Testis tissue					lambda nm1149
L0471	Human fetal heart, Lambda ZAP Express					Lambda ZAP Express
L0475	KG1-a Lambda Zap Express cDNA library			KG1-a		Lambda Zap Express (Stratagene)
L0476	Fetal brain, Stratagene					Lambda ZAP II
L0480	Stratagene cat#937212 (1992)					Lambda ZAP, pBluescript SK(-)
L0481	CD34+DIRECTIONAL					Lambda ZAPII
L0483	Human pancreatic islet					Lambda ZAPII
L0485	STRATAGENE Human skeletal muscle cDNA library, cat. #936215.	skeletal muscle	leg muscle			Lambda ZAPII
L0492	Human Genomic					pAMP
L0493	NCI CGAP Ov26	papillary serous carcinoma	ovary			pAMP1
L0497	NCI CGAP_HSC4	CD34+, CD38- from normal bone marrow donor	bone marrow			pAMP1
L0498	NCI CGAP_HSC3	CD34+, T negative, patient with chronic myelogenous	bone marrow			pAMP1
L0499	NCI CGAP_HSC2	stem cell 34+/38+	bone marrow			pAMP1
L0500	NCI CGAP Brm20	oligodendroglioma	brain			pAMP1
L0502	NCI CGAP Br15	adenocarcinoma	breast			pAMP1
L0503	NCI CGAP Br17	adenocarcinoma	breast			pAMP1

L0504	NCI CGAP Br13	breast carcinoma in situ	breast		pAMP1
L0505	NCI CGAP Br12	invasive carcinoma	breast		pAMP1
L0506	NCI CGAP Br16	lobular carcinoma in situ	breast		pAMP1
L0507	NCI CGAP Br14	normal epithelium	breast		pAMP1
L0508	NCI CGAP Lu25	bronchioalveolar carcinoma	lung		pAMP1
L0509	NCI CGAP Lu26	invasive adenocarcinoma	lung		pAMP1
L0512	NCI CGAP Ov36	borderline ovarian carcinoma	ovary		pAMP1
L0513	NCI CGAP Ov37	early stage papillary serous carcinoma	ovary		pAMP1
L0514	NCI CGAP Ov31	papillary serous carcinoma	ovary		pAMP1
L0515	NCI CGAP Ov32	papillary serous carcinoma	ovary		pAMP1
L0517	NCI CGAP Pr1				pAMP10
L0518	NCI CGAP Pr2				pAMP10
L0519	NCI CGAP Pr3				pAMP10
L0520	NCI CGAP Alv1	alveolar rhabdomyosarcoma			pAMP10
L0521	NCI CGAP Ew1	Ewing's sarcoma			pAMP10
L0522	NCI CGAP Kid1	kidney			pAMP10
L0523	NCI CGAP Lip2	liposarcoma			pAMP10
L0524	NCI CGAP Li1	liver			pAMP10
L0525	NCI CGAP Li2	liver			pAMP10
L0526	NCI CGAP Pr12	metastatic prostate bone lesion			pAMP10
L0527	NCI CGAP Ov2	ovary			pAMP10
L0528	NCI CGAP Pr5	prostate			pAMP10
L0529	NCI CGAP Pr6	prostate			pAMP10
L0530	NCI CGAP Pr8	prostate			pAMP10
L0532	NCI CGAP Thy1	thyroid			pAMP10
L0533	NCI CGAP HSC1	stem cells	bone marrow		pAMP10
L0534	Chromosome 7 Fetal	brain	brain		pAMP10

	Brain cDNA Library							
L0539	Chromosome 7 Placental cDNA Library			placenta				pAMP10
L0540	NCI CGAP_Pr10			prostate				pAMP10
L0542	NCI CGAP_Pr11			prostate				pAMP10
L0543	NCI CGAP_Pr9			prostate				pAMP10
L0544	NCI CGAP_Pr4			prostate				pAMP10
L0545	NCI CGAP_Pr4.1			prostate				pAMP10
L0546	NCI CGAP_Pr18			prostate				pAMP10
L0547	NCI CGAP_Pr16			prostate				pAMP10
L0549	NCI CGAP_HN10							pAMP10
L0550	NCI CGAP_HN9							pAMP10
L0551	NCI CGAP_HN7							pAMP10
L0553	NCI CGAP_Co22			colon				pAMP10
L0554	NCI CGAP_Li8			liver				pAMP10
L0558	NCI CGAP_Ov40			ovary				pAMP10
L0559	NCI CGAP_Ov39			ovary				pAMP10
L0560	NCI CGAP_HN12			tongue				pAMP10
L0561	NCI CGAP_HN11			tongue				pAMP10
L0562	Chromosome 7 HeLa				HeLa cell line;			pAMP10

	cDNA Library			ATCC		
L0564	Jia bone marrow stroma					pBluescript
L0565	Normal Human Trabecular Bone Cells		Bone marrow stroma Bone		Hip	pBluescript
L0581	Stratagene liver (#937224)				liver	pBluescript SK
L0584	Stratagene cDNA library Human heart, cat#936208					pBluescript SK(+)
L0586	HTCDL1					pBluescript SK(-)
L0587	Stratagene colon HT29 (#937221)					pBluescript SK-
L0588	Stratagene endothelial cell 937223					pBluescript SK-
L0589	Stratagene fetal retina 937202					pBluescript SK-
L0590	Stratagene fibroblast (#937212)					pBluescript SK-
L0591	Stratagene HeLa cell s3 937216					pBluescript SK-
L0592	Stratagene hNT neuron (#937233)					pBluescript SK-
L0593	Stratagene neuroepithelium (#937231)					pBluescript SK-
L0594	Stratagene neuroepithelium NT2RAMI 937234					pBluescript SK-
L0595	Stratagene NT2 neuronal precursor 937230		neuroepithelial cells		brain	pBluescript SK-
L0596	Stratagene colon (#937204)				colon	pBluescript SK-
L0597	Stratagene corneal				cornea	pBluescript SK-

	stroma (#937222)		cochlea						
L0598	Morton Fetal Cochlea			ear					pBluescript SK-
L0599	Stratagene lung (#937210)			lung					pBluescript SK-
L0600	Weizmann Olfactory Epithelium		olfactory epithelium	nose					pBluescript SK-
L0601	Stratagene pancreas (#937208)			pancreas					pBluescript SK-
L0602	Pancreatic Islet		pancreatic islet	pancreas					pBluescript SK-
L0603	Stratagene placenta (#937225)			placenta					pBluescript SK-
L0604	Stratagene muscle 937209		muscle	skeletal muscle					pBluescript SK-
L0605	Stratagene fetal spleen (#937205)		fetal spleen	spleen					pBluescript SK-
L0606	NCI CGAP_Lym5		follicular lymphoma	lymph node					pBluescript SK-
L0607	NCI CGAP_Lym6		mantle cell lymphoma	lymph node					pBluescript SK-
L0608	Stratagene lung carcinoma 937218		lung carcinoma	lung		NCI-H69			pBluescript SK-
L0609	Schiller astrocytoma		astrocytoma	brain					pBluescript SK- (Stratagene)
L0610	Schiller glioblastoma multiforme		glioblastoma multiforme	brain					pBluescript SK- (Stratagene)
L0611	Schiller meningioma		meningioma	brain					pBluescript SK- (Stratagene)
L0612	Schiller oligodendroglioma		oligodendroglioma	brain					pBluescript SK- (Stratagene)
L0615	22 week old human fetal liver cDNA library								pBluescriptII SK(-)
L0619	Chromosome 9 exon II								pBluescriptIIS+
L0622	HM1								pcDNAII (Invitrogen)
L0623	HM3		pectoral muscle (after mastectomy)						pcDNAII (Invitrogen)

L0625	NCI CGAP_AR1	bulk alveolar tumor				pCMV-SPORT2
L0626	NCI CGAP_GC1	bulk germ cell seminoma				pCMV-SPORT2
L0627	NCI CGAP_Co1	bulk tumor	colon			pCMV-SPORT2
L0628	NCI CGAP_Ov1	ovary bulk tumor	ovary			pCMV-SPORT2
L0629	NCI CGAP_Mel3	metastatic melanoma to bowel	bowel (skin primary)			pCMV-SPORT4
L0630	NCI CGAP_CNS1	substantia nigra	brain			pCMV-SPORT4
L0631	NCI CGAP_Br7		breast			pCMV-SPORT4
L0634	NCI CGAP_Ov8	serous adenocarcinoma	ovary			pCMV-SPORT4
L0635	NCI CGAP_PNS1	dorsal root ganglion	peripheral nervous system			pCMV-SPORT4
L0636	NCI CGAP_Pit1	four pooled pituitary adenomas	brain			pCMV-SPORT6
L0637	NCI CGAP_Bm53	three pooled meningiomas	brain			pCMV-SPORT6
L0638	NCI CGAP_Bm35	tumor, 5 pooled (see description)	brain			pCMV-SPORT6
L0639	NCI CGAP_Bm52	tumor, 5 pooled (see description)	brain			pCMV-SPORT6
L0640	NCI CGAP_Br18	four pooled high-grade tumors, including two prima	breast			pCMV-SPORT6
L0641	NCI CGAP_Co17	juvenile granulosa tumor	colon			pCMV-SPORT6
L0642	NCI CGAP_Co18	moderately differentiated adenocarcinoma	colon			pCMV-SPORT6
L0643	NCI CGAP_Co19	moderately differentiated adenocarcinoma	colon			pCMV-SPORT6
L0644	NCI CGAP_Co20	moderately differentiated adenocarcinoma	colon			pCMV-SPORT6
L0645	NCI CGAP_Co21	moderately differentiated adenocarcinoma	colon			pCMV-SPORT6
L0646	NCI CGAP_Co14	moderately-differentiated adenocarcinoma	colon			pCMV-SPORT6
L0647	NCI CGAP_Sar4	five pooled sarcomas,	connective tissue			pCMV-SPORT6

			including myxoid liposarcoma				
L0648	NCI CGAP_Eso2		squamous cell carcinoma	esophagus			pCMV-SPORT6
L0649	NCI CGAP_GU1		2 pooled high-grade transitional cell tumors	genitourinary tract			pCMV-SPORT6
L0650	NCI CGAP_Kid13		2 pooled Wilms' tumors, one primary and one metast	kidney			pCMV-SPORT6
L0651	NCI CGAP_Kid8		renal cell tumor	kidney			pCMV-SPORT6
L0652	NCI CGAP_Lu27		four pooled poorly-differentiated adenocarcinomas	lung			pCMV-SPORT6
L0653	NCI CGAP_Lu28		two pooled squamous cell carcinomas	lung			pCMV-SPORT6
L0654	NCI CGAP_Lu31			lung, cell line			pCMV-SPORT6
L0655	NCI CGAP_Lym12		lymphoma, follicular mixed small and large cell	lymph node			pCMV-SPORT6
L0656	NCI CGAP_Ov38		normal epithelium	ovary			pCMV-SPORT6
L0657	NCI CGAP_Ov23		tumor, 5 pooled (see description)	ovary			pCMV-SPORT6
L0658	NCI CGAP_Ov35		tumor, 5 pooled (see description)	ovary			pCMV-SPORT6
L0659	NCI CGAP_Pan1		adenocarcinoma	pancreas			pCMV-SPORT6
L0661	NCI CGAP_Mel15		malignant melanoma, metastatic to lymph node	skin			pCMV-SPORT6
L0662	NCI CGAP_Gas4		poorly differentiated adenocarcinoma with signet r	stomach			pCMV-SPORT6
L0663	NCI CGAP_Ut2		moderately-differentiated endometrial adenocarcino	uterus			pCMV-SPORT6
L0664	NCI CGAP_Ut3		poorly-differentiated endometrial adenocarcinoma,	uterus			pCMV-SPORT6

L0665	NCI_CGAP_Ut4	serous papillary carcinoma, high grade, 2 pooled t	uterus			pCMV-SPORT6
L0666	NCI_CGAP_Ut1	well-differentiated endometrial adenocarcinoma, 7	uterus			pCMV-SPORT6
L0667	NCI_CGAP_CML1	myeloid cells, 18 pooled CML cases, BCR/ABL rearra	whole blood			pCMV-SPORT6
L0686	Stanley Frontal SN pool 2	frontal lobe (see description)	brain			pCR2.1-TOPO (Invitrogen)
L0690	Testis, Subtracted					pCRII
L0697	Testis 1					PGEM 5zf(+)
L0698	Testis 2					PGEM 5zf(+)
L0708	NIH MGC 17	rhabdomyosarcoma	muscle			pOTB7
L0709	NIH MGC 21	choriocarcinoma	placenta			pOTB7
L0710	NIH MGC 7	small cell carcinoma	lung	MGC3		pOTB7
L0717	Gessler Wilms tumor					pSPORT1
L0731	Soares_pregnant_uterus_NbHPU		uterus			pT7T3-Pac
L0738	Human colorectal cancer					pT7T3D
L0740	Soares melanocyte 2NbHM	melanocyte				pT7T3D (Pharmacia) with a modified polylinker
L0741	Soares adult brain N2b4HB55Y		brain			pT7T3D (Pharmacia) with a modified polylinker
L0742	Soares adult brain N2b5HB55Y		brain			pT7T3D (Pharmacia) with a modified polylinker
L0743	Soares breast 2NbHBst		breast			pT7T3D (Pharmacia) with a modified polylinker

L0744	Soares breast 3NbHBst			breast			pT7T3D (Pharmacia) with a modified polylinker
L0745	Soares retina N2b4HR	retina		eye			pT7T3D (Pharmacia) with a modified polylinker
L0746	Soares retina N2b5HR	retina		eye			pT7T3D (Pharmacia) with a modified polylinker
L0747	Soares_fetal_heart_NbH H19W			heart			pT7T3D (Pharmacia) with a modified polylinker
L0748	Soares fetal liver spleen INFLS			Liver and Spleen			pT7T3D (Pharmacia) with a modified polylinker
L0749	Soares_fetal_liver_splee n_INFLS_S1			Liver and Spleen			pT7T3D (Pharmacia) with a modified polylinker
L0750	Soares_fetal_lung_NbHL 19W			lung			pT7T3D (Pharmacia) with a modified polylinker
L0751	Soares ovary tumor NbHOT	ovarian tumor		ovary			pT7T3D (Pharmacia) with a modified polylinker
L0752	Soares_parathyroid_tum or_NbHPA	parathyroid tumor		parathyroid gland			pT7T3D (Pharmacia) with a modified polylinker
L0753	Soares_pineal_gland_N3 HPG			pineal gland			pT7T3D (Pharmacia) with a modified polylinker
L0754	Soares placenta Nb2HP			placenta			pT7T3D (Pharmacia) with a modified polylinker

L0755	Soares_placenta_8to9weeks_2NbHP8to9W		placenta			pT7T3D (Pharmacia) with a modified polylinker
L0756	Soares_multiple_sclerosiss_2NbHMSP	multiple sclerosis lesions				pT7T3D (Pharmacia) with a modified polylinker V_TYPE
L0757	Soares_senescent_fibroblasts_NbHSF	senescent fibroblast				pT7T3D (Pharmacia) with a modified polylinker V_TYPE
L0758	Soares_testis_NHT					pT7T3D-Pac (Pharmacia) with a modified polylinker
L0759	Soares_total_fetus_Nb2HF8_9w					pT7T3D-Pac (Pharmacia) with a modified polylinker
L0760	Barstead aorta HPLRB3	aorta				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0761	NCI_CGAP_CLL1	B-cell, chronic lymphocytic leukemia				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0762	NCI_CGAP_Br1.1	breast				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0763	NCI_CGAP_Br2	breast				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0764	NCI_CGAP_Co3	colon				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0765	NCI_CGAP_Co4	colon				pT7T3D-Pac (Pharmacia) with a modified polylinker

L0766	NCI_CGAP_GCB1	germinal center B cell				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0767	NCI_CGAP_GC3	pooled germ cell tumors				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0768	NCI_CGAP_GC4	pooled germ cell tumors				pT7T3D-Pac (Pharmacia) with a modified polylinker
L0769	NCI_CGAP_Bm25	anaplastic oligodendroglioma	brain			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0770	NCI_CGAP_Bm23	glioblastoma (pooled)	brain			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0771	NCI_CGAP_Co8	adenocarcinoma	colon			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0772	NCI_CGAP_Co10	colon tumor RER+	colon			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0773	NCI_CGAP_Co9	colon tumor RER+	colon			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0774	NCI_CGAP_Kid3		kidney			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0775	NCI_CGAP_Kid5	2 pooled tumors (clear cell type)	kidney			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0776	NCI_CGAP_Lu5	carcinoid	lung			pT7T3D-Pac (Pharmacia) with a modified polylinker

L0777	Soares_NhHMPu_S1	Pooled human melanocyte, fetal heart, and pregnant	mixed (see below)			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0778	Barstead pancreas HPLRB1		pancreas			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0779	Soares_NFL_T_GBC_S1		pooled			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0780	Soares_NSF_F8_9W_O T_PA_P_S1		pooled			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0782	NCI_CGAP_Pr21	normal prostate	prostate			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0783	NCI_CGAP_Pr22	normal prostate	prostate			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0784	NCI_CGAP_Lei2	leiomyosarcoma	soft tissue			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0785	Barstead spleen HPLRB2		spleen			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0786	Soares_NbHFB		whole brain			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0787	NCI_CGAP_Sub1					pT7T3D-Pac (Pharmacia) with a modified polylinker
L0788	NCI_CGAP_Sub2					pT7T3D-Pac (Pharmacia) with a modified polylinker

L0789	NCI_CGAP_Sub3						pT7T3D-Pac (Pharmacia) with a modified polylinker
L0790	NCI_CGAP_Sub4						pT7T3D-Pac (Pharmacia) with a modified polylinker
L0791	NCI_CGAP_Sub5						pT7T3D-Pac (Pharmacia) with a modified polylinker
L0792	NCI_CGAP_Sub6						pT7T3D-Pac (Pharmacia) with a modified polylinker
L0793	NCI_CGAP_Sub7						pT7T3D-Pac (Pharmacia) with a modified polylinker
L0794	NCI_CGAP_GC6			pooled germ cell tumors			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0796	NCI_CGAP_Brn50			medulloblastoma		brain	pT7T3D-Pac (Pharmacia) with a modified polylinker
L0800	NCI_CGAP_Col6			colon tumor, RER+		colon	pT7T3D-Pac (Pharmacia) with a modified polylinker
L0803	NCI_CGAP_Kid11					kidney	pT7T3D-Pac (Pharmacia) with a modified polylinker
L0804	NCI_CGAP_Kid12			2 pooled tumors (clear cell type)		kidney	pT7T3D-Pac (Pharmacia) with a modified polylinker
L0805	NCI_CGAP_Lu24			carcinoid		lung	pT7T3D-Pac (Pharmacia) with a modified polylinker

L0806	NCI_CGAP_Lu19	squamous cell carcinoma, poorly differentiated (4)	lung			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0807	NCI_CGAP_Ov18	fibrotheoma	ovary			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0808	Barstead prostate BPH HPLRB4 1		prostate			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0809	NCI_CGAP_Pr28		prostate			pT7T3D-Pac (Pharmacia) with a modified polylinker
L0879	BT0254		breast			puc18
L0946	BT0333		breast			puc18
L1057	BT0559		breast			puc18
L1441	CT0249		colon			puc18
L1446	CT0254		colon			puc18
L1499	CT0322		colon			puc18
L1788	HT0229		head_neck			puc18
L1819	HT0268		head_neck			puc18
L1877	HT0340		head_neck			puc18
L1878	HT0342		head_neck			puc18
L2138	ST0186		stomach			puc18
L2174	ST0240		stomach			puc18
L2251	Human fetal lung	Fetal lung				
L2252	Human placenta	placenta				
L2255	GLC	corresponding non cancerous liver tissue				pBluescript sk(-)
L2257	NIH_MGC_65	adenocarcinoma	colon			pCMV-SPORT6
L2258	NIH_MGC_67	retinoblastoma	eye			pCMV-SPORT6
L2259	NIH_MGC_68	large cell carcinoma	lung			pCMV-SPORT6
L2260	NIH_MGC_69	large cell carcinoma, undifferentiated	lung			pCMV-SPORT6

L2261	NIH_MGC_70	epithelioid carcinoma	pancreas			pCMV-SPORT6
L2262	NIH_MGC_72	melanotic melanoma	skin			pCMV-SPORT6
L2263	NIH_MGC_66	adenocarcinoma	ovary			pCMV-SPORT6
L2264	NIH_MGC_71	leiomyosarcoma	uterus			pCMV-SPORT6
L2265	NIH_MGC_39	adenocarcinoma	pancreas			pOTB7
L2270	Lupski_dorsal_root_ganglion	dorsal root ganglia				pCMV-SPORT6 (Life Technologies)
L2289	BT0757		breast			puc18
L2333	CT0417		colon			puc18
L2338	CT0432		colon			puc18
L2346	CT0483		colon			puc18
L2357	UT0021		uterus tumor			puc18
L2367	UT0039		uterus tumor			puc18
L2377	NN0054		nervous normal			puc18
L2380	NN0068		nervous normal			puc18
L2400	NN0116		nervous normal			puc18
L2412	NN0136		nervous normal			puc18
L2413	NN0141		nervous normal			puc18
L2439	NN1022		nervous normal			puc18
L2440	NN1023		nervous normal			puc18
L2491	HT0559		head neck			puc18
L2495	HT0594		head neck			puc18
L2497	HT0618		head neck			puc18
L2504	HT0636		head neck			puc18
L2518	HT0697		head neck			puc18
L2519	HT0698		head neck			puc18
L2522	HT0704		head neck			puc18
L2539	HT0727		head neck			puc18
L2540	HT0728		head neck			puc18
L2543	HT0734		head neck			puc18
L2550	HT0743		head neck			puc18
L2570	HT0771		head neck			puc18

L2598	HT0809			head_neck			puc18
L2634	HT0872			head_neck			puc18
L2637	HT0877			head_neck			puc18
L2640	HT0881			head_neck			puc18
L2647	HT0894			head_neck			puc18
L2650	HT0934			head_neck			puc18
L2651	NIH_MGC_20		melanotic melanoma	skin			pOTB7
L2653	NIH_MGC_58		hypernephroma	kidney			pDNR-LIB (Clontech)
L2654	NIH_MGC_9		adenocarcinoma cell line	ovary			pOTB7
L2655	NIH_MGC_55		from acute myelogenous leukemia	bone marrow			pDNR-LIB (Clontech)
L2657	NIH_MGC_54		from chronic myelogenous leukemia	bone marrow			pDNR-LIB (Clontech)
L2667	NT0013			nervous_tumor			puc18
L2669	NT0022			nervous_tumor			puc18
L2670	NT0023			nervous_tumor			puc18
L2671	NT0024			nervous_tumor			puc18
L2677	NT0039			nervous_tumor			puc18
L2686	NT0058			nervous_tumor			puc18
L2702	NT0098			nervous_tumor			puc18
L2708	NT0104			nervous_tumor			puc18
L2709	NT0105			nervous_tumor			puc18
L2716	NT0117			nervous_tumor			puc18
L2738	GN0049			placenta normal			puc18
L2767	FT0044			prostate_tumor			puc18
L2791	FT0077			prostate_tumor			puc18
L2799	FT0096			prostate_tumor			puc18
L2804	FT0103			prostate_tumor			puc18
L2817	FT0131			prostate_tumor			puc18
L2831	FT0162			prostate_tumor			puc18
L2842	UM0009			uterus			puc18
L2852	UM0077			uterus			puc18

L2865	AN0004			amnion_normal			puc18
L2877	AN0027			amnion_normal			puc18
L2884	AN0041			amnion_normal			puc18
L2902	BN0036			breast_normal			puc18
L2904	BN0042			breast_normal			puc18
L2905	BN0046			breast_normal			puc18
L2906	BN0047			breast_normal			puc18
L2910	BN0070			breast_normal			puc18
L2915	BN0098			breast_normal			puc18
L2919	BN0115			breast_normal			puc18
L2962	BN0221			breast_normal			puc18
L2991	BN0264			breast_normal			puc18
L2999	BN0273			breast_normal			puc18
L3002	BN0276			breast_normal			puc18
L3019	BN0303			breast_normal			puc18
L3071	EN0026			lung_normal			puc18
L3089	ET0018			lung_tumor			puc18
L3104	ET0041			lung_tumor			puc18
L3111	ET0058			lung_tumor			puc18
L3117	ET0068			lung_tumor			puc18
L3118	ET0070			lung_tumor			puc18
L3119	ET0072			lung_tumor			puc18
L3127	ET0084			lung_tumor			puc18
L3140	MT0031			marrow			puc18
L3153	MT0049			marrow			puc18
L3199	OT0019			ovary			puc18
L3204	OT0034			ovary			puc18
L3207	OT0063			ovary			puc18
L3210	OT0067			ovary			puc18
L3215	OT0083			ovary			puc18
L3216	OT0086			ovary			puc18
L3226	FN0019			prostate_normal			puc18

L3262	FN0073			prostate_normal			puc18
L3281	FN0107			prostate_normal			puc18
L3311	FN0180			prostate_normal			puc18
L3316	FN0188			prostate_normal			puc18
L3327	SN0024			stomach_normal			puc18
L3330	SN0041			stomach_normal			puc18
L3352	TN0027			testis_normal			puc18
L3357	TN0034			testis_normal			puc18
L3372	TN0068			testis_normal			puc18
L3374	TN0070			testis_normal			puc18
L3377	TN0079			testis_normal			puc18
L3387	GKB		hepatocellular carcinoma				pBluescript sk(-)
L3388	GKC		hepatocellular carcinoma				pBluescript sk(-)
L3391	NIH MGC 53		carcinoma, cell line	bladder			pDNR-LIB (Clontech)
L3402	AN0086			amion_normal			puc18
L3403	AN0087			amion_normal			puc18
L3421	BT0634			breast			puc18
L3432	CT0461			colon			puc18
L3435	CT0465			colon			puc18
L3450	CT0508			colon			puc18
L3459	FT0175			prostate_tumor			puc18
L3466	GN0020			placenta_normal			puc18
L3480	GN0057			placenta_normal			puc18
L3484	GN0067			placenta_normal			puc18
L3485	GN0070			placenta_normal			puc18
L3491	GN0076			placenta_normal			puc18
L3496	HT0572			head_neck			puc18
L3499	HT0617			head_neck			puc18
L3503	HT0870			head_neck			puc18
L3504	HT0873			head_neck			puc18
L3506	HT0879			head_neck			puc18
L3511	HT0900			head_neck			puc18

L3516	HT0913			head neck			puc18
L3518	HT0915			head neck			puc18
L3521	HT0919			head neck			puc18
L3530	HT0939			head neck			puc18
L3561	TN0025			testis normal			puc18
L3562	TN0030			testis normal			puc18
L3603	UM0093			uterus			puc18
L3618	UT0050			uterus tumor			puc18
L3632	UT0074			uterus tumor			puc18
L3642	ADA	Adrenal gland					pBluescript sk(-)
L3643	ADB	Adrenal gland					pBluescript sk(-)
L3644	ADC	Adrenal gland					pBluescript sk(-)
L3645	Cu	adrenal cortico adenoma for Cushing's syndrome					pBluescript sk(-)
L3646	DCA						pTriplEx2
L3649	DCB						pTriplEx2
L3653	HTB	Hypothalamus					pBluescript sk(-)
L3655	HTC	Hypothalamus					pBluescript sk(-)
L3657	HTF	Hypothalamus					pBluescript sk(-)
L3658	cdA	pheochromocytoma					pTriplEx2
L3659	CB	cord blood					pBluescript
L3661	NPA	pituitary					pBluescript sk(-)
L3665	NIH_MGC_75			kidney			pDNR-LIB (Clontech)
L3667	NIH_MGC_79			placenta			pDNR-LIB (Clontech)
L3673	AN0084			amion normal			puc18
L3684	BT0812			breast			puc18
L3705	CT0486			colon			puc18
L3729	GN0079			placenta normal			puc18
L3744	HT0916			head neck			puc18
L3750	HT0945			head neck			puc18
L3783	TN0136			testis normal			puc18
L3807	UT0077			uterus tumor			puc18

L3808	UT0078						puc18
L3811	NPC	pituitary					pBluescript sk(-)
L3812	NPd	pituitary					pBluescript sk(-)
L3813	TP	pituitary tumor					pTriplEx2
L3814	BM	Bone marrow					pTriplEx2
L3815	MDS	Bone marrow					pTriplEx2
L3816	HEMBA1	whole embryo, mainly head					pME18SFL3
L3817	HEMBB1	whole embryo, mainly body					pME18SFL3
L3819	NIH MGC 76		liver				pDNR-LIB (Clontech)
L3824	NT2RM2			NT2			pME18SFL3
L3825	NT2RM4			NT2			pME18SFL3
L3826	NT2RP1			NT2			pUC19FL3
L3827	NT2RP2			NT2			pME18SFL3
L3828	NT2RP3			NT2			pME18SFL3
L3829	NT2RP4			NT2			pME18SFL3
L3831	OVARC1	ovary, tumor tissue					pME18SFL3
L3832	PLACE1	placenta					pME18SFL3
L3834	PLACE3	placenta					pME18SFL3
L3837	THYRO1	thyroid gland					pME18SFL3
L3841	NIH MGC 18	large cell carcinoma	lung				pME18SFL3
L3871	NIH MGC 19	neuroblastoma	brain				pOTB7
L3872	NCI CGAP_Skn1		skin, normal, 4 pooled sa				pOTB7
L3904	NCI CGAP_Brn64	glioblastoma with EGFR amplification	brain				pCMV-SPORT6
L3905	NCI CGAP_Brn67	anaplastic oligodendroglioma with 1p/19q loss	brain				pCMV-SPORT6
L4497	NCI CGAP_Br22	invasive ductal carcinoma, 3 pooled samples	breast				pCMV-SPORT6

L4501	NCI_CGAP_Sub8						pT7T3D-Pac (Pharmacia) with a modified polylinker
L4537	NCI_CGAP_Thy7				thyroid		pAMP10
L4556	NCI_CGAP_HN13				tongue		pCMV-SPORT6
L4558	NCI_CGAP_Pan3				pancreas		pCMV-SPORT6
L4560	NCI_CGAP_Ut7				uterus		pCMV-SPORT6
L4669	NCI_CGAP_Ov41				ovary		pCMV-SPORT6
L4747	NCI_CGAP_Brn41				brain		pT7T3D-Pac (Pharmacia) with a modified polylinker
L5286	NCI_CGAP_Thy10				thyroid		pAMP10
L5564	NCI_CGAP_HN20				normal head/neck tissue		pAMP1
L5565	NCI_CGAP_Brn66				brain		pCMV-SPORT6
L5566	NCI_CGAP_Brn70				brain		pCMV-SPORT6.ccd6
L5568	NCI_CGAP_HN21				head/neck		pAMP1
L5569	NCI_CGAP_HN17				nasopharynx		pAMP10
L5574	NCI_CGAP_HN19				nasopharynx		pAMP10
L5575	NCI_CGAP_Brn65				brain		pCMV-SPORT6
L5622	NCI_CGAP_Skn3				skin		pCMV-SPORT6
L5623	NCI_CGAP_Skn4				skin		pCMV-SPORT6

Description of Table 5

Table 5 provides a key to the OMIM reference identification numbers disclosed in Table 1B.1, column 9. OMIM reference identification numbers (Column 1) were derived from Online Mendelian Inheritance in Man (Online Mendelian Inheritance in Man, OMIM. McKusick-Nathans Institute for Genetic Medicine, Johns Hopkins University (Baltimore, MD) and National Center for Biotechnology Information, National Library of Medicine, (Bethesda, MD) 2000. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>). Column 2 provides diseases associated with the cytologic band disclosed in Table 1B.1, column 8, as determined using the Morbid Map database.

Table 5

OMIM Reference	Description
100690	Myasthenic syndrome, slow-channel congenital, 601462
100710	Myasthenic syndrome, slow-channel congenital, 601462
101000	Meningioma, NF2-related, sporadic Schwannoma, sporadic
101000	Neurofibromatosis, type 2
101000	Neurolemmomatosis
101000	Malignant mesothelioma, sporadic
102578	Leukemia, acute promyelocytic, PML/RARA type
102770	Myoadenylate deaminase deficiency
103050	Autism, succinylpurinemic
103050	Adenylosuccinase deficiency
103850	Aldolase A deficiency
104770	Amyloidosis, secondary, susceptibility to
106100	Angioedema, hereditary
106150	Hypertension, essential, susceptibility to
106150	Preeclampsia, susceptibility to
106165	Hypertension, essential, 145500
106180	Myocardial infarction, susceptibility to
107300	Antithrombin III deficiency
107670	Apolipoprotein A-II deficiency
107741	Hyperlipoproteinemia, type III
107777	Diabetes insipidus, nephrogenic, autosomal recessive, 222000
108725	Atherosclerosis, susceptibility to
108985	Atrophia areata
109270	Renal tubular acidosis, distal, 179800
109270	Spherocytosis, hereditary
109270	[Acanthocytosis, one form]
109270	[Elliptocytosis, Malaysian-Melanesian type]
109270	Hemolytic anemia due to band 3 defect
109560	Leukemia/lymphoma, B-cell, 3
109690	Asthma, nocturnal, susceptibility to
109690	Obesity, susceptibility to
109700	Hemodialysis-related amyloidosis
110100	Blepharophimosis, epicanthus inversus, and ptosis, type 1
110700	Vivax malaria, susceptibility to
113100	Brachydactyly, type C

113900	Heart block, progressive familial, type I
114835	Monocyte carboxyesterase deficiency
115665	Cataract, congenital, Volkmann type
116800	Cataract, Marner type
116806	Colorectal cancer
116860	Cavernous angiomatous malformations
117700	[Hypoceruloplasminemia, hereditary]
117700	Hemosiderosis, systemic, due to aceruloplasminemia
118485	Polycystic ovary syndrome with hyperandrogenemia
118800	Choreoathetosis, familial paroxysmal
120070	Alport syndrome, autosomal recessive, 203780
120131	Alport syndrome, autosomal recessive, 203780
120131	Hematuria, familial benign
120140	Osteoarthritis, precocious
120140	SED congenita
120140	SMED Strudwick type
120140	Stickler syndrome, type I
120140	Wagner syndrome, type II
120140	Achondrogenesis-hypochondrogenesis, type II
120140	Kniest dysplasia
120150	Osteogenesis imperfecta, 4 clinical forms, 166200, 166210, 259420, 166220
120150	Osteoporosis, idiopathic, 166710
120150	Ehlers-Danlos syndrome, type VIIA1, 130060
120215	Ehlers-Danlos syndrome, type I, 130000
120215	Ehlers-Danlos syndrome, type II, 130010
120260	Epiphyseal dysplasia, multiple, type 2, 600204
120435	Muir-Torre syndrome, 158320
120435	Colorectal cancer, hereditary, nonpolyposis, type 1 Ovarian cancer
120550	C1q deficiency, type A
120570	C1q deficiency, type B
120575	C1q deficiency, type C
120700	C3 deficiency
120950	C8 deficiency, type I
120960	C8 deficiency, type II
121050	Contractural arachnodactyly, congenital
121360	Myeloid leukemia, acute, M4Eo subtype
121800	Corneal dystrophy, crystalline, Schnyder
122720	Nicotine addiction, protection from
122720	Coumarin resistance, 122700
123000	Craniometaphyseal dysplasia
123270	[Creatine kinase, brain type, ectopic expression of]
123620	Cataract, cerulean, type 2, 601547
123660	Cataract, Coppock-like
123940	White sponge nevus, 193900
124030	Parkinsonism, susceptibility to
124030	Debrisoquine sensitivity
124200	Darier disease (keratosis follicularis)
125370	Dentatorubro-pallidolusian atrophy
125660	Myopathy, desminopathic
125660	Cardiomyopathy
126090	Hyperphenylalaninemia due to pterin-4a-carbinolamine dehydratase

	deficiency, 264070
126337	Myxoid liposarcoma
126340	Xeroderma pigmentosum, group D, 278730
126391	DNA ligase I deficiency
126600	Drusen, radial, autosomal dominant
129010	Neuropathy, congenital hypomyelinating, 1
129900	EEC syndrome-1
130410	Glutaricaciduria, type IIB
130500	Elliptocytosis-1
131210	Atherosclerosis, susceptibility to
131244	Hirschsprung disease-2, 600155
131400	Eosinophilia, familial
132700	Cylindromatosis
133171	[Erythrocytosis, familial], 133100
133200	Erythrokeratoderma variabilis
133530	Xeroderma pigmentosum, group G, 278780
133701	Exostoses, multiple, type 2
133780	Vitreoretinopathy, exudative, familial
134790	Hyperferritinemia-cataract syndrome, 600886
135300	Fibromatosis, gingival
135940	Ichthyosis vulgaris, 146700
136132	[Fish-odor syndrome], 602079
136350	Pfeiffer syndrome, 101600
136435	Ovarian dysgenesis, hypergonadotropic, with normal karyotype, 233300
136550	Macular dystrophy, North Carolina type
136836	Fucosyltransferase-6 deficiency
138030	[Hyperproglucagonemia]
138040	Cortisol resistance
138140	Glucose transport defect, blood-brain barrier
138160	Diabetes mellitus, noninsulin-dependent
138160	Fanconi-Bickel syndrome, 227810
138300	Hemolytic anemia due to glutathione reductase deficiency
138570	Non-insulin dependent diabetes mellitus, susceptibility to
138700	[Apolipoprotein H deficiency]
138981	Pulmonary alveolar proteinosis, 265120
139250	Isolated growth hormone deficiency, Illig type with absent GH and Kowarski type with bioinactive GH
139350	Epidermolytic hyperkeratosis, 113800
139350	Keratoderma, palmoplantar, nonepidermolytic
140100	[Anhaptoglobinemia]
140100	[Hypohaptoglobinemia]
141750	Alpha-thalassemia/mental retardation syndrome, type 1
141800	Methemoglobinemias, alpha-
141800	Thalassemias, alpha-
141800	Erythremias, alpha-
141800	Heinz body anemias, alpha-
141850	Thalassemia, alpha-
141850	Erythrocytosis
141850	Heinz body anemia
141850	Hemoglobin H disease
141850	Hypochromic microcytic anemia

142335	Hereditary persistence of fetal hemoglobin, heterocellular, Indian type
142600	Hemolytic anemia due to hexokinase deficiency
142989	Synpolydactyly, type II, 186000
143890	Hypercholesterolemia, familial
145001	Hyperparathyroidism-jaw tumor syndrome
145260	Pseudohypoaldosteronism, type II
145505	Hypertension, essential
145981	Hypocalciuric hypercalcemia, type II
146200	Hypoparathyroidism, familial
146760	[IgG receptor I, phagocytic, familial deficiency of]
146790	Lupus nephritis, susceptibility to
147141	Leukemia, acute lymphoblastic
147440	Growth retardation with deafness and mental retardation
147670	Rabson-Mendenhall syndrome
147670	Diabetes mellitus, insulin-resistant, with acanthosis nigricans
147670	Leprechaunism
147781	Atopy, susceptibility to
148040	Epidermolysis bullosa simplex, Koebner, Dowling-Meara, and Weber-Cockayne types, 131900, 131760, 131800
148041	Pachyonychia congenita, Jadassohn-Lewandowsky type, 167200
148043	Meesmann corneal dystrophy, 122100
148065	White sponge nevus, 193900
148070	Liver disease, susceptibility to, from hepatotoxins or viruses
148080	Epidermolytic hyperkeratosis, 113800
148370	Keratolytic winter erythema
148900	Klippel-Feil syndrome with laryngeal malformation
150200	[Placental lactogen deficiency]
150210	Lactoferrin-deficient neutrophils, 245480
150292	Epidermolysis bullosa, Herlitz junctional type, 226700
151440	Leukemia, T-cell acute lymphoblastoid
151670	Hepatic lipase deficiency
152427	Long QT syndrome-2
152445	Vohwinkel syndrome, 124500
152445	Erythrokeratoderma, progressive symmetric, 602036
152760	Hypogonadotropic hypogonadism due to GNRH deficiency, 227200
152780	Hypogonadism, hypergonadotropic
152780	Male pseudohermaphroditism due to defective LH
152790	Precocious puberty, male, 176410
152790	Leydig cell hypoplasia
153454	Ehlers-Danlos syndrome, type VI, 225400
153455	Cutis laxa, recessive, type I, 219100
154275	Malignant hyperthermia susceptibility 2
154276	Malignant hyperthermia susceptibility 3
154545	Chronic infections, due to opsonin defect
154550	Carbohydrate-deficient glycoprotein syndrome, type Ib, 602579
155555	[Red hair/fair skin]
155555	UV-induced skin damage, vulnerability to
156232	Mesomelic dysplasia, Kantaputra type
156850	Cataract, congenital, with microphthalmia
157147	Abetalipoproteinemia, 200100

157170	Holoprosencephaly-2
157640	PEO with mitochondrial DNA deletions, type 1
158590	Spinal muscular atrophy-4
159000	Muscular dystrophy, limb-girdle, type 1A
159001	Muscular dystrophy, limb-girdle, type 1B
160760	Cardiomyopathy, familial hypertrophic, 1, 192600
160760	Central core disease, one form
160781	Cardiomyopathy, hypertrophic, mid-left ventricular chamber type
160900	Myotonic dystrophy
162150	Obesity with impaired prohormone processing, 600955
162200	Neurofibromatosis, type 1
162200	Watson syndrome, 193520
162400	Neuropathy, hereditary sensory and autonomic, type 1
163729	Hypertension, pregnancy-induced
163950	Noonan syndrome-1
163950	Cardiofaciocutaneous syndrome, 115150
164731	Ovarian carcinoma, 167000
164770	Myeloid malignancy, predisposition to
164953	Liposarcoma
167410	Rhabdomyosarcoma, alveolar, 268220
168360	Paraneoplastic sensory neuropathy
168450	Hypoparathyroidism, autosomal dominant
168450	Hypoparathyroidism, autosomal recessive
168468	Metaphyseal chondrodysplasia, Murk Jansen type, 156400
168500	Parietal foramina
169600	Hailey-Hailey disease
170500	Myotonia congenita, atypical acetazolamide-responsive
170500	Paramyotonia congenita, 168300
170500	Hyperkalemic periodic paralysis
171190	Hypertension, essential, 145500
171650	Lysosomal acid phosphatase deficiency
171760	Hypophosphatasia, adult, 146300
171760	Hypophosphatasia, infantile, 241500
172400	Hemolytic anemia due to glucosephosphate isomerase deficiency
172400	Hydrops fetalis, one form
172430	Enolase deficiency
172471	Glycogenosis, hepatic, autosomal
172490	Phosphorylase kinase deficiency of liver and muscle, 261750
173470	Glanzmann thrombasthenia, type B
173610	Platelet alpha/delta storage pool deficiency
173850	Polio, susceptibility to
173870	Xeroderma pigmentosum
173870	Fanconi anemia
173910	Polycystic kidney disease, adult, type II
174000	Medullary cystic kidney disease, AD
174900	Polyposis, juvenile intestinal
176100	Porphyria cutanea tarda
176100	Porphyria, hepatoerythropoietic
176450	Sacral agenesis-1
176830	Obesity, adrenal insufficiency, and red hair
176830	ACTH deficiency
176930	Dysprothrombinemia

176930	Hypoprothrombinemia
176960	Pituitary tumor, invasive
177400	Apnea, postanesthetic
178300	Ptosis, hereditary congenital, 1
178600	Pulmonary hypertension, familial primary
178640	Pulmonary alveolar proteinosis, congenital, 265120
179095	Male infertility
179755	Renal cell carcinoma, papillary, 1
180069	Retinal dystrophy, autosomal recessive, childhood-onset
180069	Retinitis pigmentosa-20
180069	Leber congenital amaurosis-2, 204100
180071	Retinitis pigmentosa, autosomal recessive
180100	Retinitis pigmentosa-1
180105	Retinitis pigmentosa-10
180380	Night blindness, congenital stationery, rhodopsin-related
180380	Retinitis pigmentosa, autosomal recessive
180380	Retinitis pigmentosa-4, autosomal dominant
180901	Malignant hyperthermia susceptibility 1, 145600
180901	Central core disease, 117000
181405	Scapuloperoneal spinal muscular atrophy, New England type
181430	Scapuloperoneal syndrome, myopathic type
181460	Schistosoma mansoni, susceptibility/resistance to
182138	Anxiety-related personality traits
182280	Small-cell cancer of lung
182290	Smith-Magenis syndrome
182380	Glucose/galactose malabsorption
182381	Renal glucosuria, 253100
182600	Spastic paraplegia-3A
182601	Spastic paraplegia-4
182860	Pyropoikilocytosis
182860	Spherocytosis, recessive
182860	Elliptocytosis-2
182900	Spherocytosis-2
185800	Symphalangism, proximal
186580	Arthrocutaneouveal granulomatosis
186880	Leukemia/lymphoma, T-cell
186921	Leukemia, T-cell acute lymphoblastic
187040	Leukemia-1, T-cell acute lymphoblastic
188070	Bleeding disorder due to defective thromboxane A2 receptor
188450	Goiter, adolescent multinodular
188450	Goiter, nonendemic, simple
188450	Hypothyroidism, hereditary congenital
188826	Sorsby fundus dystrophy, 136900
189800	Preeclampsia/eclampsia
190040	Meningioma, SIS-related
190040	Dermatofibrosarcoma protuberans
190040	Giant-cell fibroblastoma
190195	Ichthyosiform erythroderma, congenital, 242100
190195	Ichthyosis, lamellar, autosomal recessive, 242300
190198	Leukemia, T-cell acute lymphoblastic
190300	Tremor, familial essential, 1
190605	Triphalangeal thumb-polysyndactyly syndrome

191044	Cardiomyopathy, familial hypertrophic
191092	Tuberous sclerosis-2
191315	Insensitivity to pain, congenital, with anhidrosis, 256800
192090	Ovarian carcinoma
192090	Breast cancer, lobular
192090	Endometrial carcinoma
192090	Gastric cancer, familial, 137215
192340	Diabetes insipidus, neurohypophyseal, 125700
192974	Neonatal alloimmune thrombocytopenia
192974	Glycoprotein Ia deficiency
193300	Renal cell carcinoma
193300	von Hippel-Lindau syndrome
193500	Rhabdomyosarcoma, alveolar, 268220
193500	Waardenburg syndrome, type I
193500	Waardenburg syndrome, type III, 148820
193500	Craniofacial-deafness-hand syndrome, 122880
201450	Acyl-CoA dehydrogenase, medium chain, deficiency of
201460	Acyl-CoA dehydrogenase, long chain, deficiency of
201475	VLCAD deficiency
201810	3-beta-hydroxysteroid dehydrogenase, type II, deficiency
203300	Hermansky-Pudlak syndrome
203500	Alkaptonuria
205100	Amyotrophic lateral sclerosis, juvenile
205900	Anemia, Diamond-Blackfan
207750	Hyperlipoproteinemia, type Ib
208250	Jacobs syndrome
208400	Aspartylglucosaminuria
212138	Carnitine-acylcarnitine translocase deficiency
216550	Cohen syndrome
216900	Achromatopsia
217300	Cornea plana congenita, recessive
217800	Macular corneal dystrophy
218030	Apparent mineralocorticoid excess, hypertension due to
221770	Polycystic lipomembranous osteodysplasia with sclerosing leukencephalopathy
221820	Gliososis, familial progressive subcortical
222700	Lysinuric protein intolerance
222745	DECR deficiency
222800	Hemolytic anemia due to bisphosphoglycerate mutase deficiency
222900	Sucrose intolerance
225500	Ellis-van Creveld syndrome
227645	Fanconi anemia, type C
227646	Fanconi anemia, type D
227650	Fanconi anemia, type A
229700	Fructose-bisphosphatase deficiency
229800	[Fructosuria]
230000	Fucosidosis
230400	Galactosemia
230800	Gaucher disease
230800	Gaucher disease with cardiovascular calcification
231550	Achalasia-addisonianism-alacrimia syndrome
231670	Glutaricaciduria, type I

231675	Glutaricaciduria, type IIC
231680	Glutaricaciduria, type IIA
232300	Glycogen storage disease II
232700	Glycogen storage disease VI
232800	Glycogen storage disease VII
233700	Chronic granulomatous disease due to deficiency of NCF-1
234200	Neurodegeneration with brain iron accumulation
236250	Homocystinuria due to MTHFR deficiency
236730	Urofacial syndrome
237300	Carbamoylphosphate synthetase I deficiency
239100	Van Buchem disease
240400	Scurvy
245200	Krabbe disease
245900	Norum disease
245900	Fish-eye disease
246450	HMG-CoA lyase deficiency
248510	Mannosidosis, beta-
248600	Maple syrup urine disease, type Ia
248610	Maple syrup urine disease, type II
249000	Meckel syndrome
250250	Cartilage-hair hypoplasia
250790	Methemoglobinemia due to cytochrome b5 deficiency
250850	Hypermethioninemia, persistent, autosomal dominant, due to methionine adenosyltransferase I/III deficiency
251170	Mevalonicaciduria
251600	Microphthalmia, autosomal recessive
252500	Mucopolipidosis II
252500	Mucopolipidosis III
252900	Sanfilippo syndrome, type A
253000	Mucopolysaccharidosis IVA
253250	Mulibrey nanism
255800	Schwartz-Jampel syndrome
256030	Nemaline myopathy-2
256540	Galactosialidosis
256700	Neuroblastoma
256731	Ceroid-lipofuscinosis, neuronal-5, variant late infantile
257200	Niemann-Pick disease, type A
257200	Niemann-Pick disease, type B
258501	3-methylglutaconicaciduria, type III
258900	Oroticaciduria
259900	Hyperoxaluria, primary, type 1
262000	Bjornstad syndrome
266200	Anemia, hemolytic, due to PK deficiency
270100	Situs inversus viscerum
270200	Sjogren-Larsson syndrome
272750	GM2-gangliosidosis, AB variant
272800	Tay-Sachs disease
272800	[Hex A pseudodeficiency]
272800	GM2-gangliosidosis, juvenile, adult
273800	Thrombocytopenia, neonatal alloimmune
273800	Glanzmann thrombasthenia, type A
276600	Tyrosinemia, type II

276700	Tyrosinemia, type I
276710	Tyrosinemia, type III
276900	Usher syndrome, type 1A
276901	Usher syndrome, type 2
276902	Usher syndrome, type 3
277700	Werner syndrome
278700	Xeroderma pigmentosum, group A
278760	Xeroderma pigmentosum, group F
300000	Opitz G syndrome, type I
300008	Nephrolithiasis, type I, 310468
300008	Proteinuria, low molecular weight, with hypercalciuric nephrocalcinosis
300008	Dent disease, 300009
300008	Hypophosphatemia, type III
300011	Menkes disease, 309400
300011	Occipital horn syndrome, 304150
300011	Cutis laxa, neonatal
300031	Mental retardation, X-linked, FRAXF type
300044	Wernicke-Korsakoff syndrome, susceptibility to
300046	Mental retardation, X-linked 23, nonspecific
300047	Mental retardation, X-linked 20
300048	Intestinal pseudoobstruction, neuronal, X-linked
300049	Nodular heterotopia, bilateral periventricular
300049	BPNH/MR syndrome
300055	Mental retardation with psychosis, pyramidal signs, and macroorchidism
300066	Deafness, X-linked 6, sensorineural
300071	Night blindness, congenital stationary, type 2
300075	Coffin-Lowry syndrome, 303600
300077	Mental retardation, X-linked 29
300100	Adrenoleukodystrophy
300100	Adrenomyeloneuropathy
300104	Mental retardation, X-linked nonspecific, 309541
300110	Night blindness, congenital stationary, X-linked incomplete, 300071
300123	Mental retardation with isolated growth hormone deficiency
300126	Dyskeratosis congenita-1, 305000
300127	Mental retardation, X-linked, 60
300310	Agammaglobulinemia, type 2, X-linked
300600	Ocular albinism, Forsius-Eriksson type
301000	Thrombocytopenia, X-linked, 313900
301000	Wiskott-Aldrich syndrome
301200	Amelogenesis imperfecta
301201	Amelogenesis imperfecta-3, hypoplastic type
301220	Partington syndrome II
301590	Anophthalmos-1
301830	Arthrogryposis, X-linked (spinal muscular atrophy, infantile, X-linked)
301835	Arts syndrome
301845	Bazex syndrome
302060	Noncompaction of left ventricular myocardium, isolated
302060	Barth syndrome

302060	Cardiomyopathy, X-linked dilated, 300069
302060	Endocardial fibroelastosis-2
302350	Nance-Horan syndrome
302801	Charcot-Marie-Tooth neuropathy, X-linked-2, recessive
302960	Chondrodysplasia punctata, X-linked dominant
303700	Colorblindness, blue monochromatic
303800	Colorblindness, deutan
303900	Colorblindness, protan
304040	Charcot-Marie-Tooth neuropathy, X-linked-1, dominant, 302800
304050	Aicardi syndrome
304110	Craniofrontonasal dysplasia
304800	Diabetes insipidus, nephrogenic
305100	Anhidrotic ectodermal dysplasia
305435	Heterocellular hereditary persistence of fetal hemoglobin, Swiss type
305450	FG syndrome
305900	Favism
305900	G6PD deficiency
305900	Hemolytic anemia due to G6PD deficiency
306000	Glycogenosis, X-linked hepatic, type I
306000	Glycogenosis, X-linked hepatic, type II
306100	Gonadal dysgenesis, XY female type
306700	Hemophilia A
306995	[Homosexuality, male]
307150	Hypertrichosis, congenital generalized
307800	Hypophosphatemia, hereditary
308310	Incontinentia pigmenti, familial
308800	Keratosis follicularis spinulosa decalvans
308840	Spastic paraplegia, 312900
308840	Hydrocephalus due to aqueductal stenosis, 307000
308840	MASA syndrome, 303350
309200	Manic-depressive illness, X-linked
309470	Mental retardation, X-linked, syndromic-3, with spastic diplegia
309500	Renpenning syndrome-1
309510	Mental retardation, X-linked, syndromic-1, with dystonic movements, ataxia, and seizures
309530	Mental retardation, X-linked 1, non-dysmorphic
309548	Mental retardation, X-linked, FRAXE type
309585	Mental retardation, X-linked, syndromic-6, with gynecomastia and obesity
309605	Mental retardation, X-linked, syndromic-4, with congenital contractures and low fingertip arches
309610	Mental retardation, X-linked, syndromic-2, with dysmorphism and cerebral atrophy
309620	Mental retardation-skeletal dysplasia
309850	Brunner syndrome
309900	Mucopolysaccharidosis II
310300	Emery-Dreifuss muscular dystrophy
310400	Myotubular myopathy, X-linked
310460	Myopia-1
310460	Bornholm eye disease
310490	Cowchock syndrome

311050	Optic atrophy, X-linked
311200	Oral-facial-digital syndrome 1
311300	Otopalatodigital syndrome, type I
311510	Waisman parkinsonism-mental retardation syndrome
311850	Phosphoribosyl pyrophosphate synthetase-related gout
312040	N syndrome, 310465
312060	Properdin deficiency, X-linked
312170	Pyruvate dehydrogenase deficiency
312700	Retinoschisis
312760	Turner syndrome
313400	Spondyloepiphyseal dysplasia tarda
313700	Perineal hypospadias
313700	Prostate cancer
313700	Spinal and bulbar muscular atrophy of Kennedy, 313200
313700	Breast cancer, male, with Reifenstein syndrome
313700	Androgen insensitivity, several forms
314250	Dystonia-3, torsion, with parkinsonism, Filipino type
314300	Goeminne TKCR syndrome
314400	Cardiac valvular dysplasia-1
314580	Wieacker-Wolff syndrome
600040	Colorectal cancer
600079	Colon cancer
600101	Deafness, autosomal dominant 2
600119	Muscular dystrophy, Duchenne-like, type 2
600119	Adhalinopathy, primary
600138	Retinitis pigmentosa-11
600140	Rubenstein-Taybi syndrome, 180849
600163	Long QT syndrome-3
600173	SCID, autosomal recessive, T-negative/B-positive type
600175	Spinal muscular atrophy, congenital nonprogressive, of lower limbs
600194	Ichthyosis bullosa of Siemens, 146800
600223	Spinocerebellar ataxia-4
600231	Palmoplantar keratoderma, Bothnia type
600234	HMG-CoA synthase-2 deficiency
600243	Temperature-sensitive apoptosis
600258	Colorectal cancer, hereditary nonpolyposis, type 3
600266	Resistance/susceptibility to TB, etc.
600273	Polycystic kidney disease, infantile severe, with tuberous sclerosis
600276	Cerebral arteriopathy with subcortical infarcts and leukoencephalopathy, 125310
600281	Non-insulin-dependent diabetes mellitus, 125853
600281	MODY, type 1, 125850
600309	Atrioventricular canal defect-1
600310	Pseudoachondroplasia, 177170
600310	Epiphyseal dysplasia, multiple 1, 132400
600320	Insulin-dependent diabetes mellitus-5
600332	Rippling muscle disease-1
600359	Bartter syndrome, type 2
600374	Bardet-Biedl syndrome 4
600510	Pigment dispersion syndrome
600512	Epilepsy, partial
600525	Trichodontoosseous syndrome, 190320

600536	Myopathy, congenital
600593	Craniosynostosis, Adelaide type
600617	Lipoid adrenal hyperplasia, 201710
600623	Prostate cancer, 176807
600631	Enuresis, nocturnal, 1
600650	Myopathy due to CPT II deficiency, 255110
600650	CPT deficiency, hepatic, type II, 600649
600652	Deafness, autosomal dominant 4
600698	Salivary adenoma
600698	Uterine leiomyoma
600698	Lipoma
600698	Lipomatosis, mutiple, 151900
600722	Ceroid lipofuscinosis, neuronal, variant juvenile type, with granular osmiophilic deposits
600722	Ceroid lipofuscinosis, neuronal-1, infantile, 256730
600725	Holoprosencephaly-3, 142945
600757	Orofacial cleft-3
600759	Alzheimer disease-4
600792	Deafness, autosomal recessive 5
600807	Bronchial asthma
600808	Enuresis, nocturnal, 2
600811	Xeroderma pigmentosum, group E, DDB-negative subtype, 278740
600850	Schizophrenia disorder-4
600852	Retinitis pigmentosa-17
600881	Cataract, congenital, zonular, with sutural opacities
600882	Charcot-Marie-Tooth neuropathy-2B
600897	Cataract, zonular pulverulent-1, 116200
600918	Cystinuria, type III
600956	Persistent Mullerian duct syndrome, type II, 261550
600957	Persistent Mullerian duct syndrome, type I, 261550
600958	Cardiomyopathy, familial hypertrophic, 4, 115197
600968	Gitelman syndrome, 263800
600975	Glaucoma 3, primary infantile, B
600995	Nephrotic syndrome, idiopathic, steroid-resistant
600996	Arrhythmogenic right ventricular dysplasia-2
601097	Neuropathy, recurrent, with pressure palsies, 162500
601097	Charcot-Marie-Tooth neuropathy-1A, 118220
601097	Dejerine-Sottas disease, PMP22 related, 145900
601105	Pycnodysostosis, 265800
601199	Neonatal hyperparathyroidism, 239200
601199	Hypocalcemia, autosomal dominant, 601198
601199	Hypocalciuric hypercalcemia, type I, 145980
601238	Cerebellar ataxia, Cayman type
601277	Ichthyosis, lamellar, type 2
601284	Hereditary hemorrhagic telangiectasia-2, 600376
601295	Bile acid malabsorption, primary
601309	Basal cell carcinoma, sporadic
601309	Basal cell nevus syndrome, 109400
601313	Polycystic kidney disease, adult type I, 173900
601369	Deafness, autosomal dominant 9
601386	Deafness, autosomal recessive 12
601402	Leukemia, myeloid, acute

601412	Deafness, autosomal dominant 7
601414	Retinitis pigmentosa-18
601458	Inflammatory bowel disease-2
601493	Cardiomyopathy, dilated 1C
601517	Spinocerebellar ataxia-2, 183090
601518	Prostate cancer, hereditary, 1, 176807
601596	Charcot-Marie-Tooth neuropathy, demyelinating
601604	Mycobacterial and salmonella infections, susceptibility to
601650	Paraganglioma, familial nonchromaffin, 2
601652	Glaucoma 1A, primary open angle, juvenile-onset, 137750
601669	Hirschsprung disease, one form
601676	Acute insulin response
601682	Glaucoma 1C, primary open angle
601691	Retinitis pigmentosa-19, 601718
601691	Stargardt disease-1, 248200
601691	Cone-rod dystrophy 3
601691	Fundus flavimaculatus with macular dystrophy, 248200
601692	Reis-Bucklers corneal dystrophy
601692	Corneal dystrophy, Avellino type
601692	Corneal dystrophy, Groenouw type I, 121900
601692	Corneal dystrophy, lattice type I, 122200
601718	Retinitis pigmentosa-19
601744	Systemic lupus erythematosus, susceptibility to, 1
601769	Osteoporosis, involutional
601769	Rickets, vitamin D-resistant, 277440
601771	Glaucoma 3A, primary infantile, 231300
601780	Ceroid-lipofuscinosis, neuronal-6, variant late infantile
601785	Carbohydrate-deficient glycoprotein syndrome, type I, 212065
601843	Hypothyroidism, congenital, 274400
601844	Pseudohypoaldosteronism type II
601846	Muscular dystrophy with rimmed vacuoles
601863	Bare lymphocyte syndrome, complementation group C
601928	Monilethrix, 158000
601954	Muscular dystrophy, limb-girdle, type 2G
601975	Ectodermal dysplasia/skin fragility syndrome
602025	Obesity/hyperinsulinism, susceptibility to
602078	Fibrosis of extraocular muscles, congenital, 2
602085	Postaxial polydactyly, type A2
602086	Arrhythmogenic right ventricular dysplasia-3
602088	Nephronophthisis, infantile
602089	Hemangioma, capillary, hereditary
602092	Deafness, autosomal recessive 18
602094	Lipodystrophy, familial partial
602116	Glioma
602121	Deafness, autosomal dominant nonsyndromic sensorineural, 1, 124900
602134	Tremor, familial essential, 2
602136	Refsum disease, infantile, 266510
602136	Zellweger syndrome-1, 214100
602136	Adrenoleukodystrophy, neonatal, 202370
602153	Monilethrix, 158000
602216	Peutz-Jeghers syndrome, 175200

602225	Cone-rod retinal dystrophy-2, 120970
602225	Leber congenital amaurosis, type III
602279	Oculopharyngeal muscular dystrophy, 164300
602279	Oculopharyngeal muscular dystrophy, autosomal recessive, 257950
602363	Ellis-van Creveld-like syndrome
602403	Alzheimer disease, susceptibility to
602447	Coronary artery disease, susceptibility to
602460	Deafness, autosomal dominant 15, 602459
602477	Febrile convulsions, familial, 2
602491	Hyperlipidemia, familial combined, 1
602522	Bartter syndrome, infantile, with sensorineural deafness
602568	Homocystinuria-megaloblastic anemia, cbl E type, 236270
602574	Deafness, autosomal dominant 12, 601842
602574	Deafness, autosomal dominant 8, 601543
602629	Dystonia-6, torsion
602666	Deafness, autosomal recessive 3, 600316
602716	Nephrosis-1, congenital, Finnish type, 256300
602772	Retinitis pigmentosa-24
602782	Faisalabad histiocytosis
602783	Spastic paraplegia-7

Mature Polypeptides

The present invention also encompasses mature forms of a polypeptide having the amino acid sequence of SEQ ID NO:Y and/or the amino acid sequence encoded by the cDNA in a deposited clone. Polynucleotides encoding the mature forms (such as, for example, the polynucleotide sequence in SEQ ID NO:X and/or the polynucleotide sequence contained in the cDNA of a deposited clone) are also encompassed by the invention. Moreover, fragments or variants of these polypeptides (such as, fragments as described herein, polypeptides at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99%, or 100% identical to these polypeptides, or polypeptides encoded by a polynucleotide that hybridizes under stringent conditions to the complementary strand of the polynucleotide encoding these polypeptides) are also encompassed by the invention. In preferred embodiments, these fragments or variants retain one or more functional activities of the full-length or mature form of the polypeptide (e.g., biological activity (such as, for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative disorders), antigenicity (ability to bind, or compete with a polypeptide of the invention for binding, to an anti-polypeptide of the invention antibody), immunogenicity (ability to generate antibody which binds to a specific polypeptide of the invention), ability to form multimers with polypeptides of the invention, and ability to bind to a receptor or ligand for a polypeptide of the invention). Antibodies that bind the polypeptides of the invention, and polynucleotides encoding these polypeptides are also encompassed by the invention.

According to the signal hypothesis, proteins secreted by mammalian cells have a signal or secretory leader sequence which is cleaved from the mature protein once export of the growing protein chain across the rough endoplasmic reticulum has been initiated. Most mammalian cells and even insect cells cleave secreted proteins with the same specificity. However, in some cases, cleavage of a secreted protein is not entirely uniform, which results in two or more mature species of the protein. Further, it has long been known that cleavage specificity of a secreted protein is ultimately determined by the primary structure of the complete protein, that is, it is inherent in the amino acid sequence of the polypeptide.

Methods for predicting whether a protein has a signal sequence, as well as the cleavage point for that sequence, are available. For instance, the method of McGeoch, *Virus Res.* 3:271-286 (1985), uses the information from a short N-terminal charged region and a subsequent uncharged region of the complete (uncleaved) protein. The method of von Heinje, *Nucleic Acids Res.* 14:4683-4690 (1986) uses the information from the residues surrounding the cleavage site, typically residues -13 to +2, where +1 indicates the amino terminus of the secreted protein. The accuracy of predicting the cleavage points of known mammalian secretory proteins for each of these methods is in the range of 75-80%. (von Heinje, *supra*.) However, the two methods do not always produce the same predicted cleavage point(s) for a given protein.

In the present case, the deduced amino acid sequence of the secreted polypeptide was analyzed by a computer program called SignalP (Henrik Nielsen et al., *Protein Engineering* 10:1-6 (1997)), which predicts the cellular location of a protein based on the amino acid sequence. As part of this computational prediction of localization, the methods of McGeoch and von Heinje are incorporated. The analysis of the amino acid sequences of the secreted proteins described herein by this program provided the results shown in Table 1A.

In specific embodiments, polypeptides of the invention comprise, or alternatively consist of, the predicted mature form of the polypeptide as delineated in columns 14 and 15 of Table 1A. Moreover, fragments or variants of these polypeptides (such as, fragments as described herein, polypeptides at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99%, or 100% identical to these polypeptides, or polypeptides encoded by a polynucleotide that hybridizes under stringent conditions to the complementary strand of the polynucleotide encoding these polypeptides) are also encompassed by the invention. In preferred embodiments, these fragments or variants retain one or more functional activities of the full-length or mature form of the polypeptide (e.g., biological activity (such as, for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative disorders), antigenicity (ability to bind, or compete with a polypeptide of the invention for binding, to an anti-polypeptide of the invention antibody), immunogenicity (ability to generate antibody which binds to a specific polypeptide of the invention), ability to form multimers with polypeptides of the invention, and ability to bind to a receptor or ligand for a polypeptide of the invention).

Antibodies that bind the polypeptides of the invention, and polynucleotides encoding these polypeptides are also encompassed by the invention.

Polynucleotides encoding proteins comprising, or consisting of, the predicted mature form of polypeptides of the invention (e.g., polynucleotides having the sequence of SEQ ID NO: X (Table 1A, column 4), the sequence delineated in columns 7 and 8 of Table 1A, and a sequence encoding the mature polypeptide delineated in columns 14 and 15 of Table 1A (e.g., the sequence of SEQ ID NO:X encoding the mature polypeptide delineated in columns 14 and 15 of Table 1)) are also encompassed by the invention, as are fragments or variants of these polynucleotides (such as, fragments as described herein, polynucleotides at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99%, or 100% identical to these polynucleotides, and nucleic acids which hybridizes under stringent conditions to the complementary strand of the polynucleotide).

As one of ordinary skill would appreciate, however, cleavage sites sometimes vary from organism to organism and cannot be predicted with absolute certainty. Accordingly, the present invention provides secreted polypeptides having a sequence shown in SEQ ID NO:Y which have an N-terminus beginning within 15 residues of the predicted cleavage point (i.e., having 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, or 15 more or less contiguous residues of SEQ ID NO:Y at the N-terminus when compared to the predicted mature form of the polypeptide (e.g., the mature polypeptide delineated in columns 14 and 15 of Table 1). Similarly, it is also recognized that in some cases, cleavage of the signal sequence from a secreted protein is not entirely uniform, resulting in more than one secreted species. These polypeptides, and the polynucleotides encoding such polypeptides, are contemplated by the present invention.

Moreover, the signal sequence identified by the above analysis may not necessarily predict the naturally occurring signal sequence. For example, the naturally occurring signal sequence may be further upstream from the predicted signal sequence. However, it is likely that the predicted signal sequence will be capable of directing the secreted protein to the ER. Nonetheless, the present invention provides the mature protein produced by expression of the polynucleotide sequence of SEQ ID NO:X and/or the polynucleotide sequence contained in the cDNA of a deposited clone, in a mammalian cell (e.g., COS cells, as described below). These polypeptides, and the polynucleotides encoding such polypeptides, are contemplated by the present invention.

Polynucleotide and Polypeptide Variants

The present invention is also directed to variants of the polynucleotide sequence disclosed in SEQ ID NO:X or the complementary strand thereto, nucleotide sequences encoding the polypeptide of SEQ ID NO:Y, the nucleotide sequence of SEQ ID NO:X that encodes the polypeptide sequence as defined in columns 13 and 14 of Table 1A, nucleotide sequences encoding the polypeptide sequence as defined in columns 13 and 14 of Table 1A, the nucleotide

sequence of SEQ ID NO:X encoding the polypeptide sequence as defined in Table 1B, the nucleotide sequence as defined in columns 8 and 9 of Table 2, nucleotide sequences encoding the polypeptide encoded by the nucleotide sequence as defined in columns 8 and 9 of Table 2, the nucleotide sequence as defined in column 6 of Table 1C, nucleotide sequences encoding the polypeptide encoded by the nucleotide sequence as defined in column 6 of Table 1C, the cDNA sequence contained in ATCC Deposit No:Z, nucleotide sequences encoding the polypeptide encoded by the cDNA sequence contained in ATCC Deposit No:Z, and/or nucleotide sequences encoding a mature (secreted) polypeptide encoded by the cDNA sequence contained in ATCC Deposit No:Z.

The present invention also encompasses variants of the polypeptide sequence disclosed in SEQ ID NO:Y, the polypeptide as defined in columns 13 and 14 of Table 1A, the polypeptide sequence as defined in columns 6 and 7 of Table 1B.1, a polypeptide sequence encoded by the polynucleotide sequence in SEQ ID NO:X, a polypeptide sequence encoded by the nucleotide sequence as defined in columns 8 and 9 of Table 2, a polypeptide sequence encoded by the nucleotide sequence as defined in column 6 of Table 1C, a polypeptide sequence encoded by the complement of the polynucleotide sequence in SEQ ID NO:X, the polypeptide sequence encoded by the cDNA sequence contained in ATCC Deposit No:Z and/or a mature (secreted) polypeptide encoded by the cDNA sequence contained in ATCC Deposit No:Z.

"Variant" refers to a polynucleotide or polypeptide differing from the polynucleotide or polypeptide of the present invention, but retaining essential properties thereof. Generally, variants are overall closely similar, and, in many regions, identical to the polynucleotide or polypeptide of the present invention.

Thus, one aspect of the invention provides an isolated nucleic acid molecule comprising, or alternatively consisting of, a polynucleotide having a nucleotide sequence selected from the group consisting of: (a) a nucleotide sequence described in SEQ ID NO:X or contained in the cDNA sequence of ATCC Deposit No:Z; (b) a nucleotide sequence in SEQ ID NO:X or the cDNA in ATCC Deposit No:Z which encodes the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; (c) a nucleotide sequence in SEQ ID NO:X or the cDNA in ATCC Deposit No:Z which encodes a mature polypeptide (i.e., a secreted polypeptide (e.g., as delineated in columns 14 and 15 of Table 1A)); (d) a nucleotide sequence in SEQ ID NO:X or the cDNA sequence of ATCC Deposit No:Z, which encodes a biologically active fragment of a polypeptide; (e) a nucleotide sequence in SEQ ID NO:X or the cDNA sequence of ATCC Deposit No:Z, which encodes an antigenic fragment of a polypeptide; (f) a nucleotide sequence encoding a polypeptide comprising the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; (g) a nucleotide sequence encoding a mature polypeptide of the amino acid sequence of SEQ ID NO:Y (i.e., a secreted polypeptide (e.g., as delineated in columns 14 and 15

of Table 1A)) or a mature polypeptide of the amino acid sequence encoded by the cDNA in ATCC Deposit No:Z ; (h) a nucleotide sequence encoding a biologically active fragment of a polypeptide having the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; (i) a nucleotide sequence encoding an antigenic fragment of a polypeptide having the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; and (j) a nucleotide sequence complementary to any of the nucleotide sequences in (a), (b), (c), (d), (e), (f), (g), (h), or (i) above.

The present invention is also directed to nucleic acid molecules which comprise, or alternatively consist of, a nucleotide sequence which is at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99% or 100%, identical to, for example, any of the nucleotide sequences in (a), (b), (c), (d), (e), (f), (g), (h), (i), or (j) above, the nucleotide coding sequence in SEQ ID NO:X or the complementary strand thereto, the nucleotide coding sequence of the cDNA contained in ATCC Deposit No:Z or the complementary strand thereto, a nucleotide sequence encoding the polypeptide of SEQ ID NO:Y, a nucleotide sequence encoding a polypeptide sequence encoded by the nucleotide sequence in SEQ ID NO:X, a polypeptide sequence encoded by the complement of the polynucleotide sequence in SEQ ID NO:X, a nucleotide sequence encoding the polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, the nucleotide coding sequence in SEQ ID NO:X as defined in columns 8 and 9 of Table 2 or the complementary strand thereto, a nucleotide sequence encoding the polypeptide encoded by the nucleotide sequence in SEQ ID NO:X as defined in columns 8 and 9 of Table 2 or the complementary strand thereto, the nucleotide coding sequence in SEQ ID NO:B as defined in column 6 of Table 1C or the complementary strand thereto, a nucleotide sequence encoding the polypeptide encoded by the nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1C or the complementary strand thereto, the nucleotide sequence in SEQ ID NO:X encoding the polypeptide sequence as defined in columns 6 and 7 of Table 1B.1 or the complementary strand thereto, nucleotide sequences encoding the polypeptide as defined in column 6 and 7 of Table 1B.1 or the complementary strand thereto, and/or polynucleotide fragments of any of these nucleic acid molecules (e.g., those fragments described herein). Polynucleotides which hybridize to the complement of these nucleic acid molecules under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention, as are polypeptides encoded by these polynucleotides and nucleic acids.

In a preferred embodiment, the invention encompasses nucleic acid molecules which comprise, or alternatively, consist of a polynucleotide which hybridizes under stringent hybridization conditions, or alternatively, under lower stringency conditions, to a polynucleotide in (a), (b), (c), (d), (e), (f), (g), (h), or (i), above, as are polypeptides encoded by these polynucleotides. In another preferred embodiment, polynucleotides which hybridize to the

complement of these nucleic acid molecules under stringent hybridization conditions, or alternatively, under lower stringency conditions, are also encompassed by the invention, as are polypeptides encoded by these polynucleotides.

5 In another embodiment, the invention provides a purified protein comprising, or alternatively consisting of, a polypeptide having an amino acid sequence selected from the group consisting of: (a) the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; (b) the amino acid sequence of a mature (secreted) form of a polypeptide having the amino acid sequence of SEQ ID NO:Y (e.g., as delineated in columns 14 and 15 of Table 1A) or a mature form of the amino acid sequence
10 encoded by the cDNA in ATCC Deposit No:Z mature; (c) the amino acid sequence of a biologically active fragment of a polypeptide having the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in ATCC Deposit No:Z; and (d) the amino acid sequence of an antigenic fragment of a polypeptide having the complete amino acid sequence of SEQ ID NO:Y or the complete amino acid sequence encoded by the cDNA in
15 ATCC Deposit No:Z.

The present invention is also directed to proteins which comprise, or alternatively consist of, an amino acid sequence which is at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99% or 100%, identical to, for example, any of the amino acid sequences in (a), (b), (c), or (d), above, the amino acid sequence shown in SEQ ID NO:Y, the amino acid sequence encoded by the cDNA
20 contained in ATCC Deposit No:Z, the amino acid sequence of the polypeptide encoded by the nucleotide sequence in SEQ ID NO:X as defined in columns 8 and 9 of Table 2, the amino acid sequence of the polypeptide encoded by the nucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1C, the amino acid sequence as defined in columns 6 and 7 of Table 1B.1, an amino acid sequence encoded by the nucleotide sequence in SEQ ID NO:X, and an amino acid
25 sequence encoded by the complement of the polynucleotide sequence in SEQ ID NO:X. Fragments of these polypeptides are also provided (e.g., those fragments described herein). Further proteins encoded by polynucleotides which hybridize to the complement of the nucleic acid molecules encoding these amino acid sequences under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention, as are the
30 polynucleotides encoding these proteins.

By a nucleic acid having a nucleotide sequence at least, for example, 95% "identical" to a reference nucleotide sequence of the present invention, it is intended that the nucleotide sequence of the nucleic acid is identical to the reference sequence except that the nucleotide sequence may include up to five point mutations per each 100 nucleotides of the reference nucleotide sequence
35 encoding the polypeptide. In other words, to obtain a nucleic acid having a nucleotide sequence at least 95% identical to a reference nucleotide sequence, up to 5% of the nucleotides in the reference sequence may be deleted or substituted with another nucleotide, or a number of nucleotides up to

5% of the total nucleotides in the reference sequence may be inserted into the reference sequence. The query sequence may be an entire sequence referred to in Table 1B or 2 as the ORF (open reading frame), or any fragment specified as described herein.

As a practical matter, whether any particular nucleic acid molecule or polypeptide is at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to a nucleotide sequence of the present invention can be determined conventionally using known computer programs. A preferred method for determining the best overall match between a query sequence (a sequence of the present invention) and a subject sequence, also referred to as a global sequence alignment, can be determined using the FASTDB computer program based on the algorithm of Brutlag et al. (Comp. App. Biosci. 6:237-245 (1990)). In a sequence alignment the query and subject sequences are both DNA sequences. An RNA sequence can be compared by converting U's to T's. The result of said global sequence alignment is expressed as percent identity. Preferred parameters used in a FASTDB alignment of DNA sequences to calculate percent identity are: Matrix=Unitary, k-tuple=4, Mismatch Penalty=1, Joining Penalty=30, Randomization Group Length=0, Cutoff Score=1, Gap Penalty=5, Gap Size Penalty 0.05, Window Size=500 or the length of the subject nucleotide sequence, whichever is shorter.

If the subject sequence is shorter than the query sequence because of 5' or 3' deletions, not because of internal deletions, a manual correction must be made to the results. This is because the FASTDB program does not account for 5' and 3' truncations of the subject sequence when calculating percent identity. For subject sequences truncated at the 5' or 3' ends, relative to the query sequence, the percent identity is corrected by calculating the number of bases of the query sequence that are 5' and 3' of the subject sequence, which are not matched/aligned, as a percent of the total bases of the query sequence. Whether a nucleotide is matched/aligned is determined by results of the FASTDB sequence alignment. This percentage is then subtracted from the percent identity, calculated by the above FASTDB program using the specified parameters, to arrive at a final percent identity score. This corrected score is what is used for the purposes of the present invention. Only bases outside the 5' and 3' bases of the subject sequence, as displayed by the FASTDB alignment, which are not matched/aligned with the query sequence, are calculated for the purposes of manually adjusting the percent identity score.

For example, a 90 base subject sequence is aligned to a 100 base query sequence to determine percent identity. The deletions occur at the 5' end of the subject sequence and therefore, the FASTDB alignment does not show a matched/alignment of the first 10 bases at 5' end. The 10 unpaired bases represent 10% of the sequence (number of bases at the 5' and 3' ends not matched/total number of bases in the query sequence) so 10% is subtracted from the percent identity score calculated by the FASTDB program. If the remaining 90 bases were perfectly matched the final percent identity would be 90%. In another example, a 90 base subject sequence is compared with a 100 base query sequence. This time the deletions are internal deletions so that

there are no bases on the 5' or 3' of the subject sequence which are not matched/aligned with the query. In this case the percent identity calculated by FASTDB is not manually corrected. Once again, only bases 5' and 3' of the subject sequence which are not matched/aligned with the query sequence are manually corrected for. No other manual corrections are to be made for the purposes of the present invention.

By a polypeptide having an amino acid sequence at least, for example, 95% "identical" to a query amino acid sequence of the present invention, it is intended that the amino acid sequence of the subject polypeptide is identical to the query sequence except that the subject polypeptide sequence may include up to five amino acid alterations per each 100 amino acids of the query amino acid sequence. In other words, to obtain a polypeptide having an amino acid sequence at least 95% identical to a query amino acid sequence, up to 5% of the amino acid residues in the subject sequence may be inserted, deleted, (indels) or substituted with another amino acid. These alterations of the reference sequence may occur at the amino or carboxy terminal positions of the reference amino acid sequence or anywhere between those terminal positions, interspersed either individually among residues in the reference sequence or in one or more contiguous groups within the reference sequence.

As a practical matter, whether any particular polypeptide is at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to, for instance, the amino acid sequence of a polypeptide referred to in Table 1A (e.g., the amino acid sequence delineated in columns 14 and 15) or a fragment thereof, Table 1B.1 (e.g., the amino acid sequence identified in column 6) or a fragment thereof, Table 2 (e.g., the amino acid sequence of the polypeptide encoded by the polynucleotide sequence defined in columns 8 and 9 of Table 2) or a fragment thereof, the amino acid sequence of the polypeptide encoded by the polynucleotide sequence in SEQ ID NO:B as defined in column 6 of Table 1C or a fragment thereof, the amino acid sequence of the polypeptide encoded by the nucleotide sequence in SEQ ID NO:X or a fragment thereof, or the amino acid sequence of the polypeptide encoded by cDNA contained in ATCC Deposit No:Z, or a fragment thereof, the amino acid sequence of a mature (secreted) polypeptide encoded by cDNA contained in ATCC Deposit No:Z, or a fragment thereof, can be determined conventionally using known computer programs. A preferred method for determining the best overall match between a query sequence (a sequence of the present invention) and a subject sequence, also referred to as a global sequence alignment, can be determined using the FASTDB computer program based on the algorithm of Brutlag et al. (Comp. App. Biosci.6:237-245 (1990)). In a sequence alignment the query and subject sequences are either both nucleotide sequences or both amino acid sequences. The result of said global sequence alignment is expressed as percent identity. Preferred parameters used in a FASTDB amino acid alignment are: Matrix=PAM 0, k-tuple=2, Mismatch Penalty=1, Joining Penalty=20, Randomization Group Length=0, Cutoff Score=1, Window Size=sequence length, Gap Penalty=5, Gap Size Penalty=0.05, Window Size=500 or the length of the subject amino acid sequence,

whichever is shorter.

If the subject sequence is shorter than the query sequence due to N- or C-terminal deletions, not because of internal deletions, a manual correction must be made to the results. This is because the FASTDB program does not account for N- and C-terminal truncations of the subject sequence when calculating global percent identity. For subject sequences truncated at the N- and C-termini, relative to the query sequence, the percent identity is corrected by calculating the number of residues of the query sequence that are N- and C-terminal of the subject sequence, which are not matched/aligned with a corresponding subject residue, as a percent of the total bases of the query sequence. Whether a residue is matched/aligned is determined by results of the FASTDB sequence alignment. This percentage is then subtracted from the percent identity, calculated by the above FASTDB program using the specified parameters, to arrive at a final percent identity score. This final percent identity score is what is used for the purposes of the present invention. Only residues to the N- and C-termini of the subject sequence, which are not matched/aligned with the query sequence, are considered for the purposes of manually adjusting the percent identity score. That is, only query residue positions outside the farthest N- and C-terminal residues of the subject sequence.

For example, a 90 amino acid residue subject sequence is aligned with a 100 residue query sequence to determine percent identity. The deletion occurs at the N-terminus of the subject sequence and therefore, the FASTDB alignment does not show a matching/alignment of the first 10 residues at the N-terminus. The 10 unpaired residues represent 10% of the sequence (number of residues at the N- and C-termini not matched/total number of residues in the query sequence) so 10% is subtracted from the percent identity score calculated by the FASTDB program. If the remaining 90 residues were perfectly matched the final percent identity would be 90%. In another example, a 90 residue subject sequence is compared with a 100 residue query sequence. This time the deletions are internal deletions so there are no residues at the N- or C-termini of the subject sequence which are not matched/aligned with the query. In this case the percent identity calculated by FASTDB is not manually corrected. Once again, only residue positions outside the N- and C-terminal ends of the subject sequence, as displayed in the FASTDB alignment, which are not matched/aligned with the query sequence are manually corrected for. No other manual corrections are to be made for the purposes of the present invention.

The polynucleotide variants of the invention may contain alterations in the coding regions, non-coding regions, or both. Especially preferred are polynucleotide variants containing alterations which produce silent substitutions, additions, or deletions, but do not alter the properties or activities of the encoded polypeptide. Nucleotide variants produced by silent substitutions due to the degeneracy of the genetic code are preferred. Moreover, polypeptide variants in which less than 50, less than 40, less than 30, less than 20, less than 10, or 5-50, 5-25, 5-10, 1-5, or 1-2 amino acids are substituted, deleted, or added in any combination are also

preferred. Polynucleotide variants can be produced for a variety of reasons, e.g., to optimize codon expression for a particular host (change codons in the human mRNA to those preferred by a bacterial host such as *E. coli*).

Naturally occurring variants are called "allelic variants," and refer to one of several alternate forms of a gene occupying a given locus on a chromosome of an organism. (Genes II, 5 Lewin, B., ed., John Wiley & Sons, New York (1985)). These allelic variants can vary at either the polynucleotide and/or polypeptide level and are included in the present invention. Alternatively, non-naturally occurring variants may be produced by mutagenesis techniques or by direct synthesis.

10 Using known methods of protein engineering and recombinant DNA technology, variants may be generated to improve or alter the characteristics of the polypeptides of the present invention. For instance, one or more amino acids can be deleted from the N-terminus or C-terminus of the polypeptide of the present invention without substantial loss of biological function. As an example, Ron et al. (*J. Biol. Chem.* 268: 2984-2988 (1993)) reported variant KGF proteins 15 having heparin binding activity even after deleting 3, 8, or 27 amino-terminal amino acid residues. Similarly, Interferon gamma exhibited up to ten times higher activity after deleting 8-10 amino acid residues from the carboxy terminus of this protein. (Dobeli et al., *J. Biotechnology* 7:199-216 (1988).)

Moreover, ample evidence demonstrates that variants often retain a biological activity 20 similar to that of the naturally occurring protein. For example, Gayle and coworkers (*J. Biol. Chem.* 268:22105-22111 (1993)) conducted extensive mutational analysis of human cytokine IL-1a. They used random mutagenesis to generate over 3,500 individual IL-1a mutants that averaged 2.5 amino acid changes per variant over the entire length of the molecule. Multiple mutations were examined at every possible amino acid position. The investigators found that "[m]ost of the 25 molecule could be altered with little effect on either [binding or biological activity]." In fact, only 23 unique amino acid sequences, out of more than 3,500 nucleotide sequences examined, produced a protein that significantly differed in activity from wild-type.

Furthermore, even if deleting one or more amino acids from the N-terminus or C-terminus of a polypeptide results in modification or loss of one or more biological functions, other 30 biological activities may still be retained. For example, the ability of a deletion variant to induce and/or to bind antibodies which recognize the secreted form will likely be retained when less than the majority of the residues of the secreted form are removed from the N-terminus or C-terminus. Whether a particular polypeptide lacking N- or C-terminal residues of a protein retains such immunogenic activities can readily be determined by routine methods described herein and 35 otherwise known in the art.

Thus, the invention further includes polypeptide variants which show a biological or functional activity of the polypeptides of the invention (such as, for example, activity useful in

detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cardiovascular disorders). Such variants include deletions, insertions, inversions, repeats, and substitutions selected according to general rules known in the art so as have little effect on activity.

5 The present application is directed to nucleic acid molecules at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99% or 100% identical to the nucleic acid sequences disclosed herein, (e.g., encoding a polypeptide having the amino acid sequence of an N and/or C terminal deletion), irrespective of whether they encode a polypeptide having functional activity. This is because even where a particular nucleic acid molecule does not encode a polypeptide having functional activity, one of skill in the art would still know how to use the nucleic acid molecule, for instance, as a
10 hybridization probe or a polymerase chain reaction (PCR) primer. Uses of the nucleic acid molecules of the present invention that do not encode a polypeptide having functional activity include, inter alia, (1) isolating a gene or allelic or splice variants thereof in a cDNA library; (2) *in situ* hybridization (e.g., "FISH") to metaphase chromosomal spreads to provide precise chromosomal location of the gene, as described in Verma et al., Human Chromosomes: A Manual
15 of Basic Techniques, Pergamon Press, New York (1988); (3) Northern Blot analysis for detecting mRNA expression in specific tissues (e.g., normal or diseased tissues); and (4) *in situ* hybridization (e.g., histochemistry) for detecting mRNA expression in specific tissues (e.g., normal or diseased tissues).

Preferred, however, are nucleic acid molecules having sequences at least 80%, 85%, 90%,
20 95%, 96%, 97%, 98%, 99% or 100% identical to the nucleic acid sequences disclosed herein, which do, in fact, encode a polypeptide having functional activity. By a polypeptide having "functional activity" is meant, a polypeptide capable of displaying one or more known functional activities associated with a full-length (complete) protein and/or a mature (secreted) protein of the invention. Such functional activities include, but are not limited to, biological activity (such as,
25 for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative diseases and disorders), antigenicity (ability to bind, or compete with a polypeptide of the invention for binding, to an anti-polypeptide of the invention antibody), immunogenicity (ability to generate antibody which binds to a specific polypeptide of the invention), ability to form multimers with polypeptides of the invention, and
30 ability to bind to a receptor or ligand for a polypeptide of the invention.

The functional activity of the polypeptides, and fragments, variants and derivatives of the invention, can be assayed by various methods.

For example, in one embodiment where one is assaying for the ability to bind or compete with a full-length polypeptide of the present invention for binding to an anti-polypeptide antibody,
35 various immunoassays known in the art can be used, including but not limited to, competitive and non-competitive assay systems using techniques such as radioimmunoassays, ELISA (enzyme linked immunosorbent assay), "sandwich" immunoassays, immunoradiometric assays, gel

diffusion precipitation reactions, immunodiffusion assays, *in situ* immunoassays (using colloidal gold, enzyme or radioisotope labels, for example), western blots, precipitation reactions, agglutination assays (e.g., gel agglutination assays, hemagglutination assays), complement fixation assays, immunofluorescence assays, protein A assays, and immunoelectrophoresis assays, etc. In one embodiment, antibody binding is detected by detecting a label on the primary antibody. In another embodiment, the primary antibody is detected by detecting binding of a secondary antibody or reagent to the primary antibody. In a further embodiment, the secondary antibody is labeled. Many means are known in the art for detecting binding in an immunoassay and are within the scope of the present invention.

In another embodiment, where a ligand is identified, or the ability of a polypeptide fragment, variant or derivative of the invention to multimerize is being evaluated, binding can be assayed, e.g., by means well-known in the art, such as, for example, reducing and non-reducing gel chromatography, protein affinity chromatography, and affinity blotting. See generally, Phizicky et al., *Microbiol. Rev.* 59:94-123 (1995). In another embodiment, the ability of physiological correlates of a polypeptide of the present invention to bind to a substrate(s) of the polypeptide of the invention can be routinely assayed using techniques known in the art.

In addition, assays described herein (see Examples) and otherwise known in the art may routinely be applied to measure the ability of polypeptides of the present invention and fragments, variants and derivatives thereof to elicit polypeptide related biological activity (either *in vitro* or *in vivo*). Other methods will be known to the skilled artisan and are within the scope of the invention.

Of course, due to the degeneracy of the genetic code, one of ordinary skill in the art will immediately recognize that a large number of the nucleic acid molecules having a sequence at least 80%, 85%, 90%, 95%, 96%, 97%, 98%, 99%, or 100% identical to, for example, the nucleic acid sequence of the cDNA contained in ATCC Deposit No:Z, the nucleic acid sequence referred to in Table 1B (SEQ ID NO:X), the nucleic acid sequence disclosed in Table 1A (e.g., the nucleic acid sequence delineated in columns 7 and 8), the nucleic acid sequence disclosed in Table 2 (e.g., the nucleic acid sequence delineated in columns 8 and 9) or fragments thereof, will encode polypeptides "having functional activity." In fact, since degenerate variants of any of these nucleotide sequences all encode the same polypeptide, in many instances, this will be clear to the skilled artisan even without performing the above described comparison assay. It will be further recognized in the art that, for such nucleic acid molecules that are not degenerate variants, a reasonable number will also encode a polypeptide having functional activity. This is because the skilled artisan is fully aware of amino acid substitutions that are either less likely or not likely to significantly effect protein function (e.g., replacing one aliphatic amino acid with a second aliphatic amino acid), as further described below.

For example, guidance concerning how to make phenotypically silent amino acid substitutions is provided in Bowie et al., "Deciphering the Message in Protein Sequences: Tolerance to Amino Acid Substitutions," Science 247:1306-1310 (1990), wherein the authors indicate that there are two main strategies for studying the tolerance of an amino acid sequence to change.

The first strategy exploits the tolerance of amino acid substitutions by natural selection during the process of evolution. By comparing amino acid sequences in different species, conserved amino acids can be identified. These conserved amino acids are likely important for protein function. In contrast, the amino acid positions where substitutions have been tolerated by natural selection indicates that these positions are not critical for protein function. Thus, positions tolerating amino acid substitution could be modified while still maintaining biological activity of the protein.

The second strategy uses genetic engineering to introduce amino acid changes at specific positions of a cloned gene to identify regions critical for protein function. For example, site directed mutagenesis or alanine-scanning mutagenesis (introduction of single alanine mutations at every residue in the molecule) can be used. See Cunningham and Wells, Science 244:1081-1085 (1989). The resulting mutant molecules can then be tested for biological activity.

As the authors state, these two strategies have revealed that proteins are surprisingly tolerant of amino acid substitutions. The authors further indicate which amino acid changes are likely to be permissive at certain amino acid positions in the protein. For example, most buried (within the tertiary structure of the protein) amino acid residues require nonpolar side chains, whereas few features of surface side chains are generally conserved. Moreover, tolerated conservative amino acid substitutions involve replacement of the aliphatic or hydrophobic amino acids Ala, Val, Leu and Ile; replacement of the hydroxyl residues Ser and Thr; replacement of the acidic residues Asp and Glu; replacement of the amide residues Asn and Gln, replacement of the basic residues Lys, Arg, and His; replacement of the aromatic residues Phe, Tyr, and Trp, and replacement of the small-sized amino acids Ala, Ser, Thr, Met, and Gly.

Besides conservative amino acid substitution, variants of the present invention include (i) substitutions with one or more of the non-conserved amino acid residues, where the substituted amino acid residues may or may not be one encoded by the genetic code, or (ii) substitutions with one or more of the amino acid residues having a substituent group, or (iii) fusion of the mature polypeptide with another compound, such as a compound to increase the stability and/or solubility of the polypeptide (for example, polyethylene glycol), (iv) fusion of the polypeptide with additional amino acids, such as, for example, an IgG Fc fusion region peptide, serum albumin (preferably human serum albumin) or a fragment thereof, or leader or secretory sequence, or a sequence facilitating purification, or (v) fusion of the polypeptide with another compound, such as albumin (including but not limited to recombinant albumin (see, e.g., U.S. Patent No. 5,876,969,

issued March 2, 1999, EP Patent 0 413 622, and U.S. Patent No. 5,766,883, issued June 16, 1998, herein incorporated by reference in their entirety)). Such variant polypeptides are deemed to be within the scope of those skilled in the art from the teachings herein.

For example, polypeptide variants containing amino acid substitutions of charged amino acids with other charged or neutral amino acids may produce proteins with improved characteristics, such as less aggregation. Aggregation of pharmaceutical formulations both reduces activity and increases clearance due to the aggregate's immunogenic activity. See Pinckard et al., Clin. Exp. Immunol. 2:331-340 (1967); Robbins et al., Diabetes 36: 838-845 (1987); Cleland et al., Crit. Rev. Therapeutic Drug Carrier Systems 10:307-377 (1993).

A further embodiment of the invention relates to polypeptides which comprise the amino acid sequence of a polypeptide having an amino acid sequence which contains at least one amino acid substitution, but not more than 50 amino acid substitutions, even more preferably, not more than 40 amino acid substitutions, still more preferably, not more than 30 amino acid substitutions, and still even more preferably, not more than 20 amino acid substitutions from a polypeptide sequence disclosed herein. Of course it is highly preferable for a polypeptide to have an amino acid sequence which, for example, comprises the amino acid sequence of a polypeptide of SEQ ID NO:Y, the amino acid sequence of the mature (e.g., secreted) polypeptide of SEQ ID NO:Y, an amino acid sequence encoded by SEQ ID NO:X, an amino acid sequence encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, an amino acid sequence encoded by the complement of SEQ ID NO:X, an amino acid sequence encoded by cDNA contained in ATCC Deposit No:Z, and/or the amino acid sequence of a mature (secreted) polypeptide encoded by cDNA contained in ATCC Deposit No:Z, or a fragment thereof, which contains, in order of ever-increasing preference, at least one, but not more than 10, 9, 8, 7, 6, 5, 4, 3, 2 or 1 amino acid substitutions.

In specific embodiments, the polypeptides of the invention comprise, or alternatively, consist of, fragments or variants of a reference amino acid sequence selected from: (a) the amino acid sequence of SEQ ID NO:Y or fragments thereof (e.g., the mature form and/or other fragments described herein); (b) the amino acid sequence encoded by SEQ ID NO:X or fragments thereof; (c) the amino acid sequence encoded by the complement of SEQ ID NO:X or fragments thereof; (d) the amino acid sequence encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2 or fragments thereof; and (e) the amino acid sequence encoded by cDNA contained in ATCC Deposit No:Z or fragments thereof; wherein the fragments or variants have 1-5, 5-10, 5-25, 5-50, 10-50 or 50-150, amino acid residue additions, substitutions, and/or deletions when compared to the reference amino acid sequence. In preferred embodiments, the amino acid substitutions are conservative. Polynucleotides encoding these polypeptides are also encompassed by the invention.

Polynucleotide and Polypeptide Fragments

The present invention is also directed to polynucleotide fragments of the polynucleotides (nucleic acids) of the invention. In the present invention, a "polynucleotide fragment" refers to a polynucleotide having a nucleic acid sequence which, for example: is a portion of the cDNA
5 contained in ATCC Deposit No:Z or the complementary strand thereto; is a portion of the polynucleotide sequence encoding the polypeptide encoded by the cDNA contained in ATCC Deposit No:Z or the complementary strand thereto; is a portion of the polynucleotide sequence encoding the mature (secreted) polypeptide encoded by the cDNA contained in ATCC Deposit No:Z or the complementary strand thereto; is a portion of a polynucleotide sequence encoding the
10 mature amino acid sequence as defined in columns 14 and 15 of Table 1A or the complementary strand thereto; is a portion of a polynucleotide sequence encoding the amino acid sequence encoded by the region of SEQ ID NO:X as defined in columns 8 and 9 of Table 2 or the complementary strand thereto; is a portion of the polynucleotide sequence of SEQ ID NO:X as defined in columns 8 and 9 of Table 2 or the complementary strand thereto; is a portion of the
15 polynucleotide sequence in SEQ ID NO:X or the complementary strand thereto; is a polynucleotide sequence encoding a portion of the polypeptide of SEQ ID NO:Y; is a polynucleotide sequence encoding a portion of a polypeptide encoded by SEQ ID NO:X; is a polynucleotide sequence encoding a portion of a polypeptide encoded by the complement of the polynucleotide sequence in SEQ ID NO:X; is a portion of a polynucleotide sequence encoding the
20 amino acid sequence encoded by the region of SEQ ID NO:B as defined in column 6 of Table 1C or the complementary strand thereto; or is a portion of the polynucleotide sequence of SEQ ID NO:B as defined in column 6 of Table 1C or the complementary strand thereto.

The polynucleotide fragments of the invention are preferably at least about 15 nt, and more preferably at least about 20 nt, still more preferably at least about 30 nt, and even more
25 preferably, at least about 40 nt, at least about 50 nt, at least about 75 nt, or at least about 150 nt in length. A fragment "at least 20 nt in length," for example, is intended to include 20 or more contiguous bases from the cDNA sequence contained in ATCC Deposit No:Z, or the nucleotide sequence shown in SEQ ID NO:X or the complementary strand thereto. In this context "about" includes the particularly recited value or a value larger or smaller by several (5, 4, 3, 2, or 1)
30 nucleotides, at either terminus or at both termini. These nucleotide fragments have uses that include, but are not limited to, as diagnostic probes and primers as discussed herein. Of course, larger fragments (e.g., at least 160, 170, 180, 190, 200, 250, 500, 600, 1000, or 2000 nucleotides in length) are also encompassed by the invention.

Moreover, representative examples of polynucleotide fragments of the invention comprise,
35 or alternatively consist of, a sequence from about nucleotide number 1-50, 51-100, 101-150, 151-200, 201-250, 251-300, 301-350, 351-400, 401-450, 451-500, 501-550, 551-600, 601-650, 651-700, 701-750, 751-800, 801-850, 851-900, 901-950, 951-1000, 1001-1050, 1051-1100, 1101-

1150, 1151-1200, 1201-1250, 1251-1300, 1301-1350, 1351-1400, 1401-1450, 1451-1500, 1501-1550, 1551-1600, 1601-1650, 1651-1700, 1701-1750, 1751-1800, 1801-1850, 1851-1900, 1901-1950, 1951-2000, 2001-2050, 2051-2100, 2101-2150, 2151-2200, 2201-2250, 2251-2300, 2301-2350, 2351-2400, 2401-2450, 2451-2500, 2501-2550, 2551-2600, 2601-2650, 2651-2700, 2701-2750, 2751-2800, 2801-2850, 2851-2900, 2901-2950, 2951-3000, 3001-3050, 3051-3100, 3101-3150, 3151-3200, 3201-3250, 3251-3300, 3301-3350, 3351-3400, 3401-3450, 3451-3500, 3501-3550, 3551-3600, 3601-3650, 3651-3700, 3701-3750, 3751-3800, 3801-3850, 3851-3900, 3901-3950, 3951-4000, 4001-4050, 4051-4100, 4101-4150, 4151-4200, 4201-4250, 4251-4300, 4301-4350, 4351-4400, 4401-4450, 4451-4500, 4501-4550, 4551-4600, 4601-4650, 4651-4700, 4701-4750, 4751-4800, 4801-4850, 4851-4900, 4901-4950, 4951-5000, 5001-5050, 5051-5100, 5101-5150, 5151-5200, 5201-5250, 5251-5300, 5301-5350, 5351-5400, 5401-5450, 5451-5500, 5501-5550, 5551-5600, 5601-5650, 5651-5700, 5701-5750, 5751-5800, 5801-5850, 5851-5900, 5901-5950, 5951-6000, 6001-6050, 6051-6100, 6101-6150, 6151-6200, 6201-6250, 6251-6300, 6301-6350, 6351-6400, 6401-6450, 6451-6500, 6501-6550, 6551-6600, 6601-6650, 6651-6700, 6701-6750, 6751-6800, 6801-6850, 6851-6900, 6901-6950, 6951-7000, 7001-7050, 7051-7100, 7101-7150, 7151-7200, 7201-7250, 7251-7300 or 7301 to the end of SEQ ID NO:X, or the complementary strand thereto. In this context "about" includes the particularly recited range or a range larger or smaller by several (5, 4, 3, 2, or 1) nucleotides, at either terminus or at both termini. Preferably, these fragments encode a polypeptide which has a functional activity (e.g., biological activity; such as, for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative diseases and disorders). More preferably, these polynucleotides can be used as probes or primers as discussed herein. Polynucleotides which hybridize to one or more of these polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions are also encompassed by the invention, as are polypeptides encoded by these polynucleotides.

Further representative examples of polynucleotide fragments of the invention comprise, or alternatively consist of, a sequence from about nucleotide number 1-50, 51-100, 101-150, 151-200, 201-250, 251-300, 301-350, 351-400, 401-450, 451-500, 501-550, 551-600, 601-650, 651-700, 701-750, 751-800, 801-850, 851-900, 901-950, 951-1000, 1001-1050, 1051-1100, 1101-1150, 1151-1200, 1201-1250, 1251-1300, 1301-1350, 1351-1400, 1401-1450, 1451-1500, 1501-1550, 1551-1600, 1601-1650, 1651-1700, 1701-1750, 1751-1800, 1801-1850, 1851-1900, 1901-1950, 1951-2000, 2001-2050, 2051-2100, 2101-2150, 2151-2200, 2201-2250, 2251-2300, 2301-2350, 2351-2400, 2401-2450, 2451-2500, 2501-2550, 2551-2600, 2601-2650, 2651-2700, 2701-2750, 2751-2800, 2801-2850, 2851-2900, 2901-2950, 2951-3000, 3001-3050, 3051-3100, 3101-3150, 3151-3200, 3201-3250, 3251-3300, 3301-3350, 3351-3400, 3401-3450, 3451-3500, 3501-3550, 3551-3600, 3601-3650, 3651-3700, 3701-3750, 3751-3800, 3801-3850, 3851-3900, 3901-3950, 3951-4000, 4001-4050, 4051-4100, 4101-4150, 4151-4200, 4201-4250, 4251-4300, 4301-

4350, 4351-4400, 4401-4450, 4451-4500, 4501-4550, 4551-4600, 4601-4650, 4651-4700, 4701-4750, 4751-4800, 4801-4850, 4851-4900, 4901-4950, 4951-5000, 5001-5050, 5051-5100, 5101-5150, 5151-5200, 5201-5250, 5251-5300, 5301-5350, 5351-5400, 5401-5450, 5451-5500, 5501-5550, 5551-5600, 5601-5650, 5651-5700, 5701-5750, 5751-5800, 5801-5850, 5851-5900, 5901-5950, 5951-6000, 6001-6050, 6051-6100, 6101-6150, 6151-6200, 6201-6250, 6251-6300, 6301-6350, 6351-6400, 6401-6450, 6451-6500, 6501-6550, 6551-6600, 6601-6650, 6651-6700, 6701-6750, 6751-6800, 6801-6850, 6851-6900, 6901-6950, 6951-7000, 7001-7050, 7051-7100, 7101-7150, 7151-7200, 7201-7250, 7251-7300 or 7301 to the end of the cDNA sequence contained in ATCC Deposit No:Z, or the complementary strand thereto. In this context "about" includes the particularly recited range or a range larger or smaller by several (5, 4, 3, 2, or 1) nucleotides, at either terminus or at both termini. Preferably, these fragments encode a polypeptide which has a functional activity (e.g., biological activity). More preferably, these polynucleotides can be used as probes or primers as discussed herein. Polynucleotides which hybridize to one or more of these polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions are also encompassed by the invention, as are polypeptides encoded by these polynucleotides.

Moreover, representative examples of polynucleotide fragments of the invention comprise, or alternatively consist of, a nucleic acid sequence comprising one, two, three, four, five, six, seven, eight, nine, ten, or more of the above described polynucleotide fragments of the invention in combination with a polynucleotide sequence delineated in Table 1C column 6. Additional, representative examples of polynucleotide fragments of the invention comprise, or alternatively consist of, a nucleic acid sequence comprising one, two, three, four, five, six, seven, eight, nine, ten, or more of the above described polynucleotide fragments of the invention in combination with a polynucleotide sequence that is the complementary strand of a sequence delineated in column 6 of Table 1C. In further embodiments, the above-described polynucleotide fragments of the invention comprise, or alternatively consist of, sequences delineated in Table 1C, column 6, and have a nucleic acid sequence which is different from that of the BAC fragment having the sequence disclosed in SEQ ID NO:B (see Table 1C, column 5). In additional embodiments, the above-described polynucleotide fragments of the invention comprise, or alternatively consist of, sequences delineated in Table 1C, column 6, and have a nucleic acid sequence which is different from that published for the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). In additional embodiments, the above-described polynucleotides of the invention comprise, or alternatively consist of, sequences delineated Table 1C, column 6, and have a nucleic acid sequence which is different from that contained in the BAC clone identified as BAC ID NO:A (see Table 1C, column 4). Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by

the invention. Additionally, fragments and variants of the above-described polynucleotides and polypeptides are also encompassed by the invention.

5 In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more fragments of the sequences delineated in column 6 of Table 1C, and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1C, column 2) or fragments or variants thereof. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

10 In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more fragments of the sequences delineated in column 6 of Table 1C which correspond to the same ATCC Deposit No:Z (see Table 1C, column 1), and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1A, 1B, or 1C) or fragments or variants thereof. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

15 In further specific embodiments, polynucleotides of the invention comprise, or alternatively consist of, one, two, three, four, five, six, seven, eight, nine, ten, or more fragments of the sequences delineated in the same row of column 6 of Table 1C, and the polynucleotide sequence of SEQ ID NO:X (e.g., as defined in Table 1A, 1B, or 1C) or fragments or variants thereof. Polypeptides encoded by these polynucleotides, other polynucleotides that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention.

20 In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of the sequence of SEQ ID NO:X are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids that encode these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

25 In additional specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of a fragment or variant of the sequence of SEQ ID NO:X (e.g., as described herein) are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also

encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In further specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of a fragment or variant of the sequence of SEQ ID NO:X and the 5' 10 polynucleotides of the sequence of one of the sequences delineated in column 6 of Table 1C are directly contiguous. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In specific embodiments, polynucleotides of the invention comprise, or alternatively consist of a polynucleotide sequence in which the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C and the 5' 10 polynucleotides of another sequence in column 6 are directly contiguous. In preferred embodiments, the 3' 10 polynucleotides of one of the sequences delineated in column 6 of Table 1C is directly contiguous with the 5' 10 polynucleotides of the next sequential exon delineated in Table 1C, column 6. Nucleic acids which hybridize to the complement of these 20 contiguous polynucleotides under stringent hybridization conditions or alternatively, under lower stringency conditions, are also encompassed by the invention. Polypeptides encoded by these polynucleotides and/or nucleic acids, other polynucleotides and/or nucleic acids encoding these polypeptides, and antibodies that bind these polypeptides are also encompassed by the invention. Additionally, fragments and variants of the above-described polynucleotides, nucleic acids, and polypeptides are also encompassed by the invention.

In the present invention, a "polypeptide fragment" refers to an amino acid sequence which is a portion of the amino acid sequence contained in SEQ ID NO:Y, is a portion of the mature form of SEQ ID NO:Y as defined in columns 14 and 15 of Table 1A, a portion of an amino acid sequence encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, is a portion of an amino acid sequence encoded by the polynucleotide sequence of SEQ ID NO:X, is a portion of an amino acid sequence encoded by the complement of the polynucleotide sequence in SEQ ID NO:X, is a portion of the amino acid sequence of a mature (secreted) polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or is a portion of an amino acid sequence

encoded by the cDNA contained in ATCC Deposit No:Z. Protein (polypeptide) fragments may be "free-standing," or comprised within a larger polypeptide of which the fragment forms a part or region, most preferably as a single continuous region. Representative examples of polypeptide fragments of the invention, include, for example, fragments comprising, or alternatively consisting of, from about amino acid number 1-20, 21-40, 41-60, 61-80, 81-100, 101-120, 121-140, 141-160, 161-180, 181-200, 201-220, 221-240, 241-260, 261-280, 281-300, 301-320, 321-340, 341-360, 361-380, 381-400, 401-420, 421-440, 441-460, 461-480, 481-500, 501-520, 521-540, 541-560, 561-580, 581-600, 601-620, 621-640, 641-660, 661-680, 681-700, 701-720, 721-740, 741-760, 761-780, 781-800, 801-820, 821-840, 841-860, 861-880, 881-900, 901-920, 921-940, 941-960, 961-980, 981-1000, 1001-1020, 1021-1040, 1041-1060, 1061-1080, 1081-1100, 1101-1120, 1121-1140, 1141-1160, 1161-1180, 1181-1200, 1201-1220, 1221-1240, 1241-1260, 1261-1280, 1281-1300, 1301-1320, 1321-1340, 1341-1360, 1361-1380, 1381-1400, 1401-1420, 1421-1440, or 1441 to the end of the coding region of cDNA and SEQ ID NO: Y. In a preferred embodiment, polypeptide fragments of the invention include, for example, fragments comprising, or alternatively consisting of, from about amino acid number 1-20, 21-40, 41-60, 61-80, 81-100, 101-120, 121-140, 141-160, 161-180, 181-200, 201-220, 221-240, 241-260, 261-280, 281-300, 301-320, 321-340, 341-360, 361-380, 381-400, 401-420, 421-440, 441-460, 461-480, 481-500, 501-520, 521-540, 541-560, 561-580, 581-600, 601-620, 621-640, 641-660, 661-680, 681-700, 701-720, 721-740, 741-760, 761-780, 781-800, 801-820, 821-840, 841-860, 861-880, 881-900, 901-920, 921-940, 941-960, 961-980, 981-1000, 1001-1020, 1021-1040, 1041-1060, 1061-1080, 1081-1100, 1101-1120, 1121-1140, 1141-1160, 1161-1180, 1181-1200, 1201-1220, 1221-1240, 1241-1260, 1261-1280, 1281-1300, 1301-1320, 1321-1340, 1341-1360, 1361-1380, 1381-1400, 1401-1420, 1421-1440, or 1441 to the end of the coding region of SEQ ID NO:Y. Moreover, polypeptide fragments of the invention may be at least about 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 100, 110, 120, 130, 140, or 150 amino acids in length. In this context "about" includes the particularly recited ranges or values, or ranges or values larger or smaller by several (5, 4, 3, 2, or 1) amino acids, at either extreme or at both extremes. Polynucleotides encoding these polypeptide fragments are also encompassed by the invention.

Even if deletion of one or more amino acids from the N-terminus of a protein results in modification of loss of one or more biological functions of the protein, other functional activities (e.g., biological activities; such as, for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative diseases and disorders; ability to multimerize; ability to bind a ligand; antigenic ability useful for production of polypeptide specific antibodies) may still be retained. For example, the ability of shortened muteins to induce and/or bind to antibodies which recognize the complete or mature forms of the polypeptides generally will be retained when less than the majority of the residues of the complete or mature polypeptide are removed from the N-terminus. Whether a particular

polypeptide lacking N-terminal residues of a complete polypeptide retains such immunologic activities can readily be determined by routine methods described herein and otherwise known in the art. It is not unlikely that a mutein with a large number of deleted N-terminal amino acid residues may retain some biological or immunogenic activities. In fact, peptides composed of as few as six amino acid residues may often evoke an immune response.

Accordingly, polypeptide fragments include the secreted protein as well as the mature form. Further preferred polypeptide fragments include the secreted protein or the mature form having a continuous series of deleted residues from the amino or the carboxy terminus, or both. For example, any number of amino acids, ranging from 1-60, can be deleted from the amino terminus of either the secreted polypeptide or the mature form. Similarly, any number of amino acids, ranging from 1-30, can be deleted from the carboxy terminus of the secreted protein or mature form. Furthermore, any combination of the above amino and carboxy terminus deletions are preferred. Similarly, polynucleotides encoding these polypeptide fragments are also preferred.

The present invention further provides polypeptides having one or more residues deleted from the amino terminus of the amino acid sequence of a polypeptide disclosed herein (e.g., a polypeptide of SEQ ID NO:Y, a polypeptide as defined in columns 14 and 15 of Table 1A, a polypeptide encoded by the polynucleotide sequence contained in SEQ ID NO:X or the complement thereof, a polypeptide encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, a polypeptide encoded by the portion of SEQ ID NO:B as defined in column 6 of Table 1C, a polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or a mature polypeptide encoded by the cDNA contained in ATCC Deposit No:Z). In particular, N-terminal deletions may be described by the general formula m-q, where q is a whole integer representing the total number of amino acid residues in a polypeptide of the invention (e.g., the polypeptide disclosed in SEQ ID NO:Y, the mature (secreted) portion of SEQ ID NO:Y as defined in columns 14 and 15 of Table 1A, or the polypeptide encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2), and m is defined as any integer ranging from 2 to q-6. Polynucleotides encoding these polypeptides are also encompassed by the invention.

The present invention further provides polypeptides having one or more residues from the carboxy terminus of the amino acid sequence of a polypeptide disclosed herein (e.g., a polypeptide of SEQ ID NO:Y, the mature (secreted) portion of SEQ ID NO:Y as defined in columns 14 and 15 of Table 1A, a polypeptide encoded by the polynucleotide sequence contained in SEQ ID NO:X, a polypeptide encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, a polypeptide encoded by the portion of SEQ ID NO:B as defined in column 6 of Table 1C, a polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or a mature polypeptide encoded by the cDNA contained in ATCC Deposit No:Z). In particular, C-terminal deletions may be described by the general formula 1-n, where n is any whole integer ranging from 6 to q-1, and

where n corresponds to the position of amino acid residue in a polypeptide of the invention. Polynucleotides encoding these polypeptides are also encompassed by the invention.

In addition, any of the above described N- or C-terminal deletions can be combined to produce a N- and C-terminal deleted polypeptide. The invention also provides polypeptides having one or more amino acids deleted from both the amino and the carboxyl termini, which may be described generally as having residues m-n of a polypeptide encoded by SEQ ID NO:X (e.g., including, but not limited to, the preferred polypeptide disclosed as SEQ ID NO:Y, the mature (secreted) portion of SEQ ID NO:Y as defined in columns 14 and 15 of Table 1A, and the polypeptide encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2), the cDNA contained in ATCC Deposit No:Z, and/or the complement thereof, where n and m are integers as described above. Polynucleotides encoding these polypeptides are also encompassed by the invention.

Also as mentioned above, even if deletion of one or more amino acids from the C-terminus of a protein results in modification or loss of one or more biological functions of the protein, other functional activities (e.g., biological activities such as, for example, activity useful in detecting, preventing, diagnosing, prognosticating, treating, and/or ameliorating cancer and other hyperproliferative diseases and disorders; ability to multimerize; ability to bind a ligand; antigenic ability useful for production of polypeptide specific antibodies) may still be retained. For example the ability of the shortened mutein to induce and/or bind to antibodies which recognize the complete or mature forms of the polypeptide generally will be retained when less than the majority of the residues of the complete or mature polypeptide are removed from the C-terminus. Whether a particular polypeptide lacking C-terminal residues of a complete polypeptide retains such immunologic activities can readily be determined by routine methods described herein and otherwise known in the art. It is not unlikely that a mutein with a large number of deleted C-terminal amino acid residues may retain some biological or immunogenic activities. In fact, peptides composed of as few as six amino acid residues may often evoke an immune response.

The present application is also directed to proteins containing polypeptides at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to a polypeptide sequence set forth herein. In preferred embodiments, the application is directed to proteins containing polypeptides at least 80%, 85%, 90%, 95%, 96%, 97%, 98% or 99% identical to polypeptides having the amino acid sequence of the specific N- and C-terminal deletions. Polynucleotides encoding these polypeptides are also encompassed by the invention.

Any polypeptide sequence encoded by, for example, the polynucleotide sequences set forth as SEQ ID NO:X or the complement thereof, (presented, for example, in Tables 1A and 2), the cDNA contained in ATCC Deposit No:Z, or the polynucleotide sequence as defined in column 6 of Table 1C, may be analyzed to determine certain preferred regions of the polypeptide. For example, the amino acid sequence of a polypeptide encoded by a polynucleotide sequence of SEQ

5 ID NO:X (e.g., the polypeptide of SEQ ID NO:Y and the polypeptide encoded by the portion of
SEQ ID NO:X as defined in columns 8 and 9 of Table 2) or the cDNA contained in ATCC
Deposit No:Z may be analyzed using the default parameters of the DNASTAR computer
algorithm (DNASTAR, Inc., 1228 S. Park St., Madison, WI 53715 USA;
http://www.dnastar.com/).

Polypeptide regions that may be routinely obtained using the DNASTAR computer
algorithm include, but are not limited to, Garnier-Robson alpha-regions, beta-regions,
turn-regions, and coil-regions; Chou-Fasman alpha-regions, beta-regions, and turn-regions;
10 Kyte-Doolittle hydrophilic regions and hydrophobic regions; Eisenberg alpha- and
beta-amphipathic regions; Karplus-Schulz flexible regions; Emini surface-forming regions; and
Jameson-Wolf regions of high antigenic index. Among highly preferred polynucleotides of the
invention in this regard are those that encode polypeptides comprising regions that combine
several structural features, such as several (e.g., 1, 2, 3 or 4) of the features set out above.

Additionally, Kyte-Doolittle hydrophilic regions and hydrophobic regions, Emini
15 surface-forming regions, and Jameson-Wolf regions of high antigenic index (i.e., containing four
or more contiguous amino acids having an antigenic index of greater than or equal to 1.5, as
identified using the default parameters of the Jameson-Wolf program) can routinely be used to
determine polypeptide regions that exhibit a high degree of potential for antigenicity. Regions of
high antigenicity are determined from data by DNASTAR analysis by choosing values which
20 represent regions of the polypeptide which are likely to be exposed on the surface of the
polypeptide in an environment in which antigen recognition may occur in the process of initiation
of an immune response.

Preferred polypeptide fragments of the invention are fragments comprising, or
alternatively, consisting of, an amino acid sequence that displays a functional activity (e.g.
25 biological activity such as, for example, activity useful in detecting, preventing, diagnosing,
prognosticating, treating, and/or ameliorating cancer and other hyperproliferative diseases and
disorders; ability to multimerize; ability to bind a ligand; antigenic ability useful for production of
polypeptide specific antibodies) of the polypeptide sequence of which the amino acid sequence is a
fragment. By a polypeptide displaying a "functional activity" is meant a polypeptide capable of
30 one or more known functional activities associated with a full-length protein, such as, for example,
biological activity, antigenicity, immunogenicity, and/or multimerization, as described herein.

Other preferred polypeptide fragments are biologically active fragments. Biologically
active fragments are those exhibiting activity similar, but not necessarily identical, to an activity of
the polypeptide of the present invention. The biological activity of the fragments may include an
35 improved desired activity, or a decreased undesirable activity.

In preferred embodiments, polypeptides of the invention comprise, or alternatively consist
of, one, two, three, four, five or more of the antigenic fragments of the polypeptide of SEQ ID

NO:Y, or portions thereof. Polynucleotides encoding these polypeptides are also encompassed by the invention.

Epitopes and Antibodies

5 The present invention encompasses polypeptides comprising, or alternatively consisting of, an epitope of: the polypeptide sequence shown in SEQ ID NO:Y; a polypeptide sequence encoded by SEQ ID NO:X or the complementary strand thereto; the polypeptide sequence encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2; the polypeptide sequence encoded by the portion of SEQ ID NO:B as defined in column 6 of Table 1C
10 or the complement thereto; the polypeptide sequence encoded by the cDNA contained in ATCC Deposit No:Z; or the polypeptide sequence encoded by a polynucleotide that hybridizes to the sequence of SEQ ID NO:X, the complement of the sequence of SEQ ID NO:X, the complement of a portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, or the cDNA sequence contained in ATCC Deposit No:Z under stringent hybridization conditions or alternatively, under
15 lower stringency hybridization as defined *supra*. The present invention further encompasses polynucleotide sequences encoding an epitope of a polypeptide sequence of the invention (such as, for example, the sequence disclosed in SEQ ID NO:X, or a fragment thereof), polynucleotide sequences of the complementary strand of a polynucleotide sequence encoding an epitope of the invention, and polynucleotide sequences which hybridize to the complementary strand under
20 stringent hybridization conditions or alternatively, under lower stringency hybridization conditions defined *supra*.

 The term "epitopes," as used herein, refers to portions of a polypeptide having antigenic or immunogenic activity in an animal, preferably a mammal, and most preferably in a human. In a preferred embodiment, the present invention encompasses a polypeptide comprising an epitope,
25 as well as the polynucleotide encoding this polypeptide. An "immunogenic epitope," as used herein, is defined as a portion of a protein that elicits an antibody response in an animal, as determined by any method known in the art, for example, by the methods for generating antibodies described *infra*. (See, for example, Geysen et al., Proc. Natl. Acad. Sci. USA 81:3998-4002 (1983)). The term "antigenic epitope," as used herein, is defined as a portion of a protein to
30 which an antibody can immunospecifically bind its antigen as determined by any method well known in the art, for example, by the immunoassays described herein. Immunospecific binding excludes non-specific binding but does not necessarily exclude cross-reactivity with other antigens. Antigenic epitopes need not necessarily be immunogenic.

 Fragments which function as epitopes may be produced by any conventional means. (See,
35 e.g., Houghten, R. A., Proc. Natl. Acad. Sci. USA 82:5131-5135 (1985) further described in U.S. Patent No. 4,631,211.)

In the present invention, antigenic epitopes preferably contain a sequence of at least 4, at least 5, at least 6, at least 7, more preferably at least 8, at least 9, at least 10, at least 11, at least 12, at least 13, at least 14, at least 15, at least 20, at least 25, at least 30, at least 40, at least 50, and, most preferably, between about 15 to about 30 amino acids. Preferred polypeptides comprising immunogenic or antigenic epitopes are at least 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, or 100 amino acid residues in length. Additional non-exclusive preferred antigenic epitopes include the antigenic epitopes disclosed herein, as well as portions thereof. Antigenic epitopes are useful, for example, to raise antibodies, including monoclonal antibodies, that specifically bind the epitope. Preferred antigenic epitopes include the antigenic epitopes disclosed herein, as well as any combination of two, three, four, five or more of these antigenic epitopes. Antigenic epitopes can be used as the target molecules in immunoassays. (See, for instance, Wilson et al., Cell 37:767-778 (1984); Sutcliffe et al., Science 219:660-666 (1983)).

Non-limiting examples of epitopes of polypeptides that can be used to generate antibodies of the invention include a polypeptide comprising, or alternatively consisting of, at least one, two, three, four, five, six or more of the portion(s) of SEQ ID NO:Y specified in column 6 of Table 1B.1. These polypeptide fragments have been determined to bear antigenic epitopes of the proteins of the invention by the analysis of the Jameson-Wolf antigenic index which is included in the DNASTar suite of computer programs. By "comprise" it is intended that a polypeptide contains at least one, two, three, four, five, six or more of the portion(s) of SEQ ID NO:Y shown in column 6 of Table 1B.1, but it may contain additional flanking residues on either the amino or carboxyl termini of the recited portion. Such additional flanking sequences are preferably sequences naturally found adjacent to the portion; i.e., contiguous sequence shown in SEQ ID NO:Y. The flanking sequence may, however, be sequences from a heterologous polypeptide, such as from another protein described herein or from a heterologous polypeptide not described herein. In particular embodiments, epitope portions of a polypeptide of the invention comprise one, two, three, or more of the portions of SEQ ID NO:Y shown in column 6 of Table 1B.1.

Similarly, immunogenic epitopes can be used, for example, to induce antibodies according to methods well known in the art. See, for instance, Sutcliffe et al., *supra*; Wilson et al., *supra*; Chow et al., Proc. Natl. Acad. Sci. USA 82:910-914; and Bittle et al., J. Gen. Virol. 66:2347-2354 (1985). Preferred immunogenic epitopes include the immunogenic epitopes disclosed herein, as well as any combination of two, three, four, five or more of these immunogenic epitopes. The polypeptides comprising one or more immunogenic epitopes may be presented for eliciting an antibody response together with a carrier protein, such as an albumin, to an animal system (such as rabbit or mouse), or, if the polypeptide is of sufficient length (at least about 25 amino acids), the polypeptide may be presented without a carrier. However, immunogenic epitopes comprising as few as 8 to 10 amino acids have been shown to be sufficient

to raise antibodies capable of binding to, at the very least, linear epitopes in a denatured polypeptide (e.g., in Western blotting).

Epitope-bearing polypeptides of the present invention may be used to induce antibodies according to methods well known in the art including, but not limited to, *in vivo* immunization, *in vitro* immunization, and phage display methods. See, e.g., Sutcliffe et al., *supra*; Wilson et al., *supra*, and Bittle et al., J. Gen. Virol., 66:2347-2354 (1985). If *in vivo* immunization is used, animals may be immunized with free peptide; however, anti-peptide antibody titer may be boosted by coupling the peptide to a macromolecular carrier, such as keyhole limpet hemacyanin (KLH) or tetanus toxoid. For instance, peptides containing cysteine residues may be coupled to a carrier using a linker such as maleimidobenzoyl- N-hydroxysuccinimide ester (MBS), while other peptides may be coupled to carriers using a more general linking agent such as glutaraldehyde. Animals such as rabbits, rats and mice are immunized with either free or carrier- coupled peptides, for instance, by intraperitoneal and/or intradermal injection of emulsions containing about 100 µg of peptide or carrier protein and Freund's adjuvant or any other adjuvant known for stimulating an immune response. Several booster injections may be needed, for instance, at intervals of about two weeks, to provide a useful titer of anti-peptide antibody which can be detected, for example, by ELISA assay using free peptide adsorbed to a solid surface. The titer of anti-peptide antibodies in serum from an immunized animal may be increased by selection of anti-peptide antibodies, for instance, by adsorption to the peptide on a solid support and elution of the selected antibodies according to methods well known in the art.

As one of skill in the art will appreciate, and as discussed above, the polypeptides of the present invention (e.g., those comprising an immunogenic or antigenic epitope) can be fused to heterologous polypeptide sequences. For example, polypeptides of the present invention (including fragments or variants thereof), may be fused with the constant domain of immunoglobulins (IgA, IgE, IgG, IgM), or portions thereof (CH1, CH2, CH3, or any combination thereof and portions thereof, resulting in chimeric polypeptides. By way of another non-limiting example, polypeptides and/or antibodies of the present invention (including fragments or variants thereof) may be fused with albumin (including but not limited to recombinant human serum albumin or fragments or variants thereof (see, e.g., U.S. Patent No. 5,876,969, issued March 2, 1999, EP Patent 0 413 622, and U.S. Patent No. 5,766,883, issued June 16, 1998, herein incorporated by reference in their entirety)). In a preferred embodiment, polypeptides and/or antibodies of the present invention (including fragments or variants thereof) are fused with the mature form of human serum albumin (i.e., amino acids 1 – 585 of human serum albumin as shown in Figures 1 and 2 of EP Patent 0 322 094) which is herein incorporated by reference in its entirety. In another preferred embodiment, polypeptides and/or antibodies of the present invention (including fragments or variants thereof) are fused with polypeptide fragments comprising, or alternatively consisting of, amino acid residues 1-z of human serum albumin, where z is an integer

from 369 to 419, as described in U.S. Patent 5,766,883 herein incorporated by reference in its entirety. Polypeptides and/or antibodies of the present invention (including fragments or variants thereof) may be fused to either the N- or C-terminal end of the heterologous protein (e.g., immunoglobulin Fc polypeptide or human serum albumin polypeptide). Polynucleotides encoding fusion proteins of the invention are also encompassed by the invention.

Such fusion proteins as those described above may facilitate purification and may increase half-life *in vivo*. This has been shown for chimeric proteins consisting of the first two domains of the human CD4-polypeptide and various domains of the constant regions of the heavy or light chains of mammalian immunoglobulins. See, e.g., EP 394,827; Traunecker et al., *Nature*, 331:84-86 (1988). Enhanced delivery of an antigen across the epithelial barrier to the immune system has been demonstrated for antigens (e.g., insulin) conjugated to an FcRn binding partner such as IgG or Fc fragments (see, e.g., PCT Publications WO 96/22024 and WO 99/04813). IgG fusion proteins that have a disulfide-linked dimeric structure due to the IgG portion desulfide bonds have also been found to be more efficient in binding and neutralizing other molecules than monomeric polypeptides or fragments thereof alone. See, e.g., Fountoulakis et al., *J. Biochem.*, 270:3958-3964 (1995). Nucleic acids encoding the above epitopes can also be recombined with a gene of interest as an epitope tag (e.g., the hemagglutinin (HA) tag or flag tag) to aid in detection and purification of the expressed polypeptide. For example, a system described by Janknecht et al. allows for the ready purification of non-denatured fusion proteins expressed in human cell lines (Janknecht et al., 1991, *Proc. Natl. Acad. Sci. USA* 88:8972- 897). In this system, the gene of interest is subcloned into a vaccinia recombination plasmid such that the open reading frame of the gene is translationally fused to an amino-terminal tag consisting of six histidine residues. The tag serves as a matrix binding domain for the fusion protein. Extracts from cells infected with the recombinant vaccinia virus are loaded onto Ni²⁺ nitriloacetic acid-agarose column and histidine-tagged proteins can be selectively eluted with imidazole-containing buffers.

Fusion Proteins

Any polypeptide of the present invention can be used to generate fusion proteins. For example, the polypeptide of the present invention, when fused to a second protein, can be used as an antigenic tag. Antibodies raised against the polypeptide of the present invention can be used to indirectly detect the second protein by binding to the polypeptide. Moreover, because secreted proteins target cellular locations based on trafficking signals, polypeptides of the present invention which are shown to be secreted can be used as targeting molecules once fused to other proteins.

Examples of domains that can be fused to polypeptides of the present invention include not only heterologous signal sequences, but also other heterologous functional regions. The fusion does not necessarily need to be direct, but may occur through linker sequences.

In certain preferred embodiments, proteins of the invention are fusion proteins comprising

an amino acid sequence that is an N and/or C- terminal deletion of a polypeptide of the invention. In preferred embodiments, the invention is directed to a fusion protein comprising an amino acid sequence that is at least 90%, 95%, 96%, 97%, 98% or 99% identical to a polypeptide sequence of the invention. Polynucleotides encoding these proteins are also encompassed by the invention.

5 Moreover, fusion proteins may also be engineered to improve characteristics of the polypeptide of the present invention. For instance, a region of additional amino acids, particularly charged amino acids, may be added to the N-terminus of the polypeptide to improve stability and persistence during purification from the host cell or subsequent handling and storage. Also, peptide moieties may be added to the polypeptide to facilitate purification. Such regions may be removed prior to final preparation of the polypeptide. The addition of peptide moieties to facilitate handling of polypeptides are familiar and routine techniques in the art.

 As one of skill in the art will appreciate that, as discussed above, polypeptides of the present invention, and epitope-bearing fragments thereof, can be combined with heterologous polypeptide sequences. For example, the polypeptides of the present invention may be fused with heterologous polypeptide sequences, for example, the polypeptides of the present invention may be fused with the constant domain of immunoglobulins (IgA, IgE, IgG, IgM) or portions thereof (CH1, CH2, CH3, and any combination thereof, including both entire domains and portions thereof), or albumin (including, but not limited to, native or recombinant human albumin or fragments or variants thereof (see, e.g., U.S. Patent No. 5,876,969, issued March 2, 1999, EP Patent 0 413 622, and U.S. Patent No. 5,766,883, issued June 16, 1998, herein incorporated by reference in their entirety)), resulting in chimeric polypeptides. For example, EP-A-O 464 533 (Canadian counterpart 2045869) discloses fusion proteins comprising various portions of constant region of immunoglobulin molecules together with another human protein or part thereof. In many cases, the Fc part in a fusion protein is beneficial in therapy and diagnosis, and thus can result in, for example, improved pharmacokinetic properties (EP-A 0232 262). Alternatively, deleting the Fc part after the fusion protein has been expressed, detected, and purified, would be desired. For example, the Fc portion may hinder therapy and diagnosis if the fusion protein is used as an antigen for immunizations. In drug discovery, for example, human proteins, such as hIL-5, have been fused with Fc portions for the purpose of high-throughput screening assays to identify antagonists of hIL-5. See, D. Bennett et al., J. Molecular Recognition 8:52-58 (1995); K. Johanson et al., J. Biol. Chem. 270:9459-9471 (1995).

 Moreover, the polypeptides of the present invention can be fused to marker sequences, such as a polypeptide which facilitates purification of the fused polypeptide. In preferred embodiments, the marker amino acid sequence is a hexa-histidine peptide, such as the tag provided in a pQE vector (QIAGEN, Inc., 9259 Eton Avenue, Chatsworth, CA, 91311), among others, many of which are commercially available. As described in Gentz et al., Proc. Natl. Acad. Sci. USA 86:821-824 (1989), for instance, hexa-histidine provides for convenient purification of the

fusion protein. Another peptide tag useful for purification, the "HA" tag, corresponds to an epitope derived from the influenza hemagglutinin protein (Wilson et al., Cell 37:767 (1984)).

Additional fusion proteins of the invention may be generated through the techniques of gene-shuffling, motif-shuffling, exon-shuffling, and/or codon-shuffling (collectively referred to as "DNA shuffling"). DNA shuffling may be employed to modulate the activities of polypeptides of the invention, such methods can be used to generate polypeptides with altered activity, as well as agonists and antagonists of the polypeptides. See, generally, U.S. Patent Nos. 5,605,793; 5,811,238; 5,830,721; 5,834,252; and 5,837,458, and Patten et al., Curr. Opinion Biotechnol. 8:724-33 (1997); Harayama, Trends Biotechnol. 16(2):76-82 (1998); Hansson, et al., J. Mol. Biol. 287:265-76 (1999); and Lorenzo and Blasco, Biotechniques 24(2):308- 13 (1998) (each of these patents and publications are hereby incorporated by reference in its entirety). In one embodiment, alteration of polynucleotides corresponding to SEQ ID NO:X and the polypeptides encoded by these polynucleotides may be achieved by DNA shuffling. DNA shuffling involves the assembly of two or more DNA segments by homologous or site-specific recombination to generate variation in the polynucleotide sequence. In another embodiment, polynucleotides of the invention, or the encoded polypeptides, may be altered by being subjected to random mutagenesis by error-prone PCR, random nucleotide insertion or other methods prior to recombination. In another embodiment, one or more components, motifs, sections, parts, domains, fragments, etc., of a polynucleotide encoding a polypeptide of the invention may be recombined with one or more components, motifs, sections, parts, domains, fragments, etc. of one or more heterologous molecules.

Thus, any of these above fusions can be engineered using the polynucleotides or the polypeptides of the present invention.

Recombinant and Synthetic Production of Polypeptides of the Invention

The present invention also relates to vectors containing the polynucleotide of the present invention, host cells, and the production of polypeptides by synthetic and recombinant techniques. The vector may be, for example, a phage, plasmid, viral, or retroviral vector. Retroviral vectors may be replication competent or replication defective. In the latter case, viral propagation generally will occur only in complementing host cells.

The polynucleotides of the invention may be joined to a vector containing a selectable marker for propagation in a host. Generally, a plasmid vector is introduced in a precipitate, such as a calcium phosphate precipitate, or in a complex with a charged lipid. If the vector is a virus, it may be packaged in vitro using an appropriate packaging cell line and then transduced into host cells.

The polynucleotide insert should be operatively linked to an appropriate promoter, such as the phage lambda PL promoter, the E. coli lac, trp, phoA and tac promoters, the SV40 early and

late promoters and promoters of retroviral LTRs, to name a few. Other suitable promoters will be known to the skilled artisan. The expression constructs will further contain sites for transcription initiation, termination, and, in the transcribed region, a ribosome binding site for translation. The coding portion of the transcripts expressed by the constructs will preferably include a translation
5 initiating codon at the beginning and a termination codon (UAA, UGA or UAG) appropriately positioned at the end of the polypeptide to be translated.

As indicated, the expression vectors will preferably include at least one selectable marker. Such markers include dihydrofolate reductase, G418, glutamine synthase, or neomycin resistance for eukaryotic cell culture, and tetracycline, kanamycin or ampicillin resistance genes for culturing
10 in *E. coli* and other bacteria. Representative examples of appropriate hosts include, but are not limited to, bacterial cells, such as *E. coli*, *Streptomyces* and *Salmonella typhimurium* cells; fungal cells, such as yeast cells (e.g., *Saccharomyces cerevisiae* or *Pichia pastoris* (ATCC Accession No. 201178)); insect cells such as *Drosophila* S2 and *Spodoptera Sf9* cells; animal cells such as CHO, COS, 293, and Bowes melanoma cells; and plant cells. Appropriate culture mediums and
15 conditions for the above-described host cells are known in the art.

Among vectors preferred for use in bacteria include pQE70, pQE60 and pQE-9, available from QIAGEN, Inc.; pBluescript vectors, Phagescript vectors, pNH8A, pNH16a, pNH18A, pNH46A, available from Stratagene Cloning Systems, Inc.; and ptrc99a, pKK223-3, pKK233-3, pDR540, pRIT5 available from Pharmacia Biotech, Inc. Among preferred eukaryotic vectors are
20 pWLNEO, pSV2CAT, pOG44, pXT1 and pSG available from Stratagene; and pSVK3, pBPV, pMSG and pSVL available from Pharmacia. Preferred expression vectors for use in yeast systems include, but are not limited to pYES2, pYD1, pTEF1/Zeo, pYES2/GS, pPICZ, pGAPZ, pGAPZalph, pPIC9, pPIC3.5, pHIL-D2, pHIL-S1, pPIC3.5K, pPIC9K, and PAO815 (all available from Invitrogen, Carlsbad, CA). Other suitable vectors will be readily apparent to the skilled
25 artisan.

Vectors which use glutamine synthase (GS) or DHFR as the selectable markers can be amplified in the presence of the drugs methionine sulfoximine or methotrexate, respectively. An advantage of glutamine synthase based vectors are the availability of cell lines (e.g., the murine myeloma cell line, NS0) which are glutamine synthase negative. Glutamine synthase expression
30 systems can also function in glutamine synthase expressing cells (e.g., Chinese Hamster Ovary (CHO) cells) by providing additional inhibitor to prevent the functioning of the endogenous gene. A glutamine synthase expression system and components thereof are detailed in PCT publications: WO87/04462; WO86/05807; WO89/01036; WO89/10404; and WO91/06657, which are hereby incorporated in their entireties by reference herein. Additionally, glutamine synthase expression
35 vectors can be obtained from Lonza Biologics, Inc. (Portsmouth, NH). Expression and production of monoclonal antibodies using a GS expression system in murine myeloma cells is described in

Bebbington *et al.*, *Bio/technology* 10:169(1992) and in Biblia and Robinson *Biotechnol. Prog.* 11:1 (1995) which are herein incorporated by reference.

The present invention also relates to host cells containing the above-described vector constructs described herein, and additionally encompasses host cells containing nucleotide sequences of the invention that are operably associated with one or more heterologous control regions (e.g., promoter and/or enhancer) using techniques known of in the art. The host cell can be a higher eukaryotic cell, such as a mammalian cell (e.g., a human derived cell), or a lower eukaryotic cell, such as a yeast cell, or the host cell can be a prokaryotic cell, such as a bacterial cell. A host strain may be chosen which modulates the expression of the inserted gene sequences, or modifies and processes the gene product in the specific fashion desired. Expression from certain promoters can be elevated in the presence of certain inducers; thus expression of the genetically engineered polypeptide may be controlled. Furthermore, different host cells have characteristics and specific mechanisms for the translational and post-translational processing and modification (e.g., phosphorylation, cleavage) of proteins. Appropriate cell lines can be chosen to ensure the desired modifications and processing of the foreign protein expressed.

Introduction of the nucleic acids and nucleic acid constructs of the invention into the host cell can be effected by calcium phosphate transfection, DEAE-dextran mediated transfection, cationic lipid-mediated transfection, electroporation, transduction, infection, or other methods. Such methods are described in many standard laboratory manuals, such as Davis *et al.*, *Basic Methods In Molecular Biology* (1986). It is specifically contemplated that the polypeptides of the present invention may in fact be expressed by a host cell lacking a recombinant vector.

In addition to encompassing host cells containing the vector constructs discussed herein, the invention also encompasses primary, secondary, and immortalized host cells of vertebrate origin, particularly mammalian origin, that have been engineered to delete or replace endogenous genetic material (e.g., the coding sequence), and/or to include genetic material (e.g., heterologous polynucleotide sequences) that is operably associated with polynucleotides of the invention, and which activates, alters, and/or amplifies endogenous polynucleotides. For example, techniques known in the art may be used to operably associate heterologous control regions (e.g., promoter and/or enhancer) and endogenous polynucleotide sequences via homologous recombination (see, e.g., US Patent Number 5,641,670, issued June 24, 1997; International Publication Number WO 96/29411; International Publication Number WO 94/12650; Koller *et al.*, *Proc. Natl. Acad. Sci. USA* 86:8932-8935 (1989); and Zijlstra *et al.*, *Nature* 342:435-438 (1989), the disclosures of each of which are incorporated by reference in their entireties).

Polypeptides of the invention can be recovered and purified from recombinant cell cultures by well-known methods including ammonium sulfate or ethanol precipitation, acid extraction, anion or cation exchange chromatography, phosphocellulose chromatography, hydrophobic interaction chromatography, affinity chromatography, hydroxylapatite

chromatography and lectin chromatography. Most preferably, high performance liquid chromatography ("HPLC") is employed for purification.

Polypeptides of the present invention can also be recovered from: products purified from natural sources, including bodily fluids, tissues and cells, whether directly isolated or cultured; products of chemical synthetic procedures; and products produced by recombinant techniques from a prokaryotic or eukaryotic host, including, for example, bacterial, yeast, higher plant, insect, and mammalian cells. Depending upon the host employed in a recombinant production procedure, the polypeptides of the present invention may be glycosylated or may be non-glycosylated. In addition, polypeptides of the invention may also include an initial modified methionine residue, in some cases as a result of host-mediated processes. Thus, it is well known in the art that the N-terminal methionine encoded by the translation initiation codon generally is removed with high efficiency from any protein after translation in all eukaryotic cells. While the N-terminal methionine on most proteins also is efficiently removed in most prokaryotes, for some proteins, this prokaryotic removal process is inefficient, depending on the nature of the amino acid to which the N-terminal methionine is covalently linked.

In one embodiment, the yeast *Pichia pastoris* is used to express polypeptides of the invention in a eukaryotic system. *Pichia pastoris* is a methylotrophic yeast which can metabolize methanol as its sole carbon source. A main step in the methanol metabolism pathway is the oxidation of methanol to formaldehyde using O₂. This reaction is catalyzed by the enzyme alcohol oxidase. In order to metabolize methanol as its sole carbon source, *Pichia pastoris* must generate high levels of alcohol oxidase due, in part, to the relatively low affinity of alcohol oxidase for O₂. Consequently, in a growth medium depending on methanol as a main carbon source, the promoter region of one of the two alcohol oxidase genes (*AOX1*) is highly active. In the presence of methanol, alcohol oxidase produced from the *AOX1* gene comprises up to approximately 30% of the total soluble protein in *Pichia pastoris*. See Ellis, S.B., *et al.*, *Mol. Cell. Biol.* 5:1111-21 (1985); Koutz, P.J., *et al.*, *Yeast* 5:167-77 (1989); Tschopp, J.F., *et al.*, *Nucl. Acids Res.* 15:3859-76 (1987). Thus, a heterologous coding sequence, such as, for example, a polynucleotide of the present invention, under the transcriptional regulation of all or part of the *AOX1* regulatory sequence is expressed at exceptionally high levels in *Pichia* yeast grown in the presence of methanol.

In one example, the plasmid vector pPIC9K is used to express DNA encoding a polypeptide of the invention, as set forth herein, in a *Pichea* yeast system essentially as described in "*Pichia* Protocols: Methods in Molecular Biology," D.R. Higgins and J. Cregg, eds. The Humana Press, Totowa, NJ, 1998. This expression vector allows expression and secretion of a polypeptide of the invention by virtue of the strong *AOX1* promoter linked to the *Pichia pastoris*

alkaline phosphatase (PHO) secretory signal peptide (i.e., leader) located upstream of a multiple cloning site.

Many other yeast vectors could be used in place of pPIC9K, such as, pYES2, pYD1, pTEF1/Zeo, pYES2/GS, pPICZ, pGAPZ, pGAPZalpha, pPIC9, pPIC3.5, pHIL-D2, pHIL-S1, pPIC3.5K, and PAO815, as one skilled in the art would readily appreciate, as long as the proposed expression construct provides appropriately located signals for transcription, translation, secretion (if desired), and the like, including an in-frame AUG as required.

In another embodiment, high-level expression of a heterologous coding sequence, such as, for example, a polynucleotide of the present invention, may be achieved by cloning the heterologous polynucleotide of the invention into an expression vector such as, for example, pGAPZ or pGAPZalpha, and growing the yeast culture in the absence of methanol.

In addition to encompassing host cells containing the vector constructs discussed herein, the invention also encompasses primary, secondary, and immortalized host cells of vertebrate origin, particularly mammalian origin, that have been engineered to delete or replace endogenous genetic material (e.g., coding sequence), and/or to include genetic material (e.g., heterologous polynucleotide sequences) that is operably associated with polynucleotides of the invention, and which activates, alters, and/or amplifies endogenous polynucleotides. For example, techniques known in the art may be used to operably associate heterologous control regions (e.g., promoter and/or enhancer) and endogenous polynucleotide sequences via homologous recombination (see, e.g., U.S. Patent No. 5,641,670, issued June 24, 1997; International Publication No. WO 96/29411, published September 26, 1996; International Publication No. WO 94/12650, published August 4, 1994; Koller et al., Proc. Natl. Acad. Sci. USA 86:8932-8935 (1989); and Zijlstra et al., Nature 342:435-438 (1989), the disclosures of each of which are incorporated by reference in their entireties).

In addition, polypeptides of the invention can be chemically synthesized using techniques known in the art (e.g., see Creighton, 1983, *Proteins: Structures and Molecular Principles*, W.H. Freeman & Co., N.Y., and Hunkapiller et al., *Nature*, 310:105-111 (1984)). For example, a polypeptide corresponding to a fragment of a polypeptide can be synthesized by use of a peptide synthesizer. Furthermore, if desired, nonclassical amino acids or chemical amino acid analogs can be introduced as a substitution or addition into the polypeptide sequence. Non-classical amino acids include, but are not limited to, to the D-isomers of the common amino acids, 2,4-diaminobutyric acid, α -amino isobutyric acid, 4-aminobutyric acid, Abu, 2-amino butyric acid, γ -Abu, e-Ahx, 6-amino hexanoic acid, Aib, 2-amino isobutyric acid, 3-amino propionic acid, ornithine, norleucine, norvaline, hydroxyproline, sarcosine, citrulline, homocitrulline, cysteic acid, t-butylglycine, t-butylalanine, phenylglycine, cyclohexylalanine, b-alanine, fluoro-amino acids, designer amino acids such as b-methyl amino acids, Ca-methyl amino acids, Na-methyl amino

acids, and amino acid analogs in general. Furthermore, the amino acid can be D (dextrorotary) or L (levorotary).

The invention encompasses polypeptides of the present invention which are differentially modified during or after translation, e.g., by glycosylation, acetylation, phosphorylation, amidation, derivatization by known protecting/blocking groups, proteolytic cleavage, linkage to an antibody molecule or other cellular ligand, etc. Any of numerous chemical modifications may be carried out by known techniques, including but not limited, to specific chemical cleavage by cyanogen bromide, trypsin, chymotrypsin, papain, V8 protease, NaBH₄; acetylation, formylation, oxidation, reduction; metabolic synthesis in the presence of tunicamycin; etc.

Additional post-translational modifications encompassed by the invention include, for example, e.g., N-linked or O-linked carbohydrate chains, processing of N-terminal or C-terminal ends), attachment of chemical moieties to the amino acid backbone, chemical modifications of N-linked or O-linked carbohydrate chains, and addition or deletion of an N-terminal methionine residue as a result of procaryotic host cell expression. The polypeptides may also be modified with a detectable label, such as an enzymatic, fluorescent, isotopic or affinity label to allow for detection and isolation of the protein.

Examples of suitable enzymes include horseradish peroxidase, alkaline phosphatase, beta-galactosidase, or acetylcholinesterase; examples of suitable prosthetic group complexes include streptavidin/biotin and avidin/biotin; examples of suitable fluorescent materials include umbelliferone, fluorescein, fluorescein isothiocyanate, rhodamine, dichlorotriazinylamine fluorescein, dansyl chloride or phycoerythrin; an example of a luminescent material includes luminol; examples of bioluminescent materials include luciferase, luciferin, and aequorin; and examples of suitable radioactive material include iodine (¹²¹I, ¹²³I, ¹²⁵I, ¹³¹I), carbon (¹⁴C), sulfur (³⁵S), tritium (³H), indium (¹¹¹In, ¹¹²In, ^{113m}In, ^{115m}In), technetium (⁹⁹Tc, ^{99m}Tc), thallium (²⁰¹Tl), gallium (⁶⁸Ga, ⁶⁷Ga), palladium (¹⁰³Pd), molybdenum (⁹⁹Mo), xenon (¹³³Xe), fluorine (¹⁸F), ¹⁵³Sm, ¹⁷⁷Lu, ¹⁵⁹Gd, ¹⁴⁹Pm, ¹⁴⁰La, ¹⁷⁵Yb, ¹⁶⁶Ho, ⁹⁰Y, ⁴⁷Sc, ¹⁸⁶Re, ¹⁸⁸Re, ¹⁴²Pr, ¹⁰⁵Rh, and ⁹⁷Ru.

In specific embodiments, a polypeptide of the present invention or fragment or variant thereof is attached to macrocyclic chelators that associate with radiometal ions, including but not limited to, ¹⁷⁷Lu, ⁹⁰Y, ¹⁶⁶Ho, and ¹⁵³Sm, to polypeptides. In a preferred embodiment, the radiometal ion associated with the macrocyclic chelators is ¹¹¹In. In another preferred embodiment, the radiometal ion associated with the macrocyclic chelator is ⁹⁰Y. In specific embodiments, the macrocyclic chelator is 1,4,7,10-tetraazacyclododecane-N,N',N'',N'''-tetraacetic acid (DOTA). In other specific embodiments, DOTA is attached to an antibody of the invention or fragment thereof via a linker molecule. Examples of linker molecules useful for conjugating DOTA to a polypeptide are commonly known in the art - see, for example, DeNardo et al., Clin Cancer Res. 4(10):2483-90 (1998); Peterson et al., Bioconjug. Chem. 10(4):553-7 (1999); and

Zimmerman et al, Nucl. Med. Biol. 26(8):943-50 (1999); which are hereby incorporated by reference in their entirety.

As mentioned, the proteins of the invention may be modified by either natural processes, such as posttranslational processing, or by chemical modification techniques which are well known in the art. It will be appreciated that the same type of modification may be present in the same or varying degrees at several sites in a given polypeptide. Polypeptides of the invention may be branched, for example, as a result of ubiquitination, and they may be cyclic, with or without branching. Cyclic, branched, and branched cyclic polypeptides may result from posttranslation natural processes or may be made by synthetic methods. Modifications include acetylation, acylation, ADP-ribosylation, amidation, covalent attachment of flavin, covalent attachment of a heme moiety, covalent attachment of a nucleotide or nucleotide derivative, covalent attachment of a lipid or lipid derivative, covalent attachment of phosphatidylinositol, cross-linking, cyclization, disulfide bond formation, demethylation, formation of covalent cross-links, formation of cysteine, formation of pyroglutamate, formylation, gamma-carboxylation, glycosylation, GPI anchor formation, hydroxylation, iodination, methylation, myristoylation, oxidation, pegylation, proteolytic processing, phosphorylation, prenylation, racemization, selenoylation, sulfation, transfer-RNA mediated addition of amino acids to proteins such as arginylation, and ubiquitination. (See, for instance, PROTEINS - STRUCTURE AND MOLECULAR PROPERTIES, 2nd Ed., T. E. Creighton, W. H. Freeman and Company, New York (1993); POSTTRANSLATIONAL COVALENT MODIFICATION OF PROTEINS, B. C. Johnson, Ed., Academic Press, New York, pgs. 1-12 (1983); Seifter et al., Meth. Enzymol. 182:626-646 (1990); Rattan et al., Ann. N.Y. Acad. Sci. 663:48-62 (1992)).

Also provided by the invention are chemically modified derivatives of the polypeptides of the invention which may provide additional advantages such as increased solubility, stability and circulating time of the polypeptide, or decreased immunogenicity (see U.S. Patent No. 4,179,337). The chemical moieties for derivitization may be selected from water soluble polymers such as polyethylene glycol, ethylene glycol/propylene glycol copolymers, carboxymethylcellulose, dextran, polyvinyl alcohol and the like. The polypeptides may be modified at random positions within the molecule, or at predetermined positions within the molecule and may include one, two, three or more attached chemical moieties.

The polymer may be of any molecular weight, and may be branched or unbranched. For polyethylene glycol, the preferred molecular weight is between about 1 kDa and about 100 kDa (the term "about" indicating that in preparations of polyethylene glycol, some molecules will weigh more, some less, than the stated molecular weight) for ease in handling and manufacturing. Other sizes may be used, depending on the desired therapeutic profile (e.g., the duration of sustained release desired, the effects, if any on biological activity, the ease in handling, the degree or lack of antigenicity and other known effects of the polyethylene glycol to a therapeutic protein

or analog). For example, the polyethylene glycol may have an average molecular weight of about 200, 500, 1000, 1500, 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500, 10,000, 10,500, 11,000, 11,500, 12,000, 12,500, 13,000, 13,500, 14,000, 14,500, 15,000, 15,500, 16,000, 16,500, 17,000, 17,500, 18,000, 18,500, 19,000, 19,500, 20,000, 25,000, 30,000, 35,000, 40,000, 45,000, 50,000, 55,000, 60,000, 65,000, 70,000, 75,000, 80,000, 85,000, 90,000, 95,000, or 100,000 kDa.

As noted above, the polyethylene glycol may have a branched structure. Branched polyethylene glycols are described, for example, in U.S. Patent No. 5,643,575; Morpurgo *et al.*, *Appl. Biochem. Biotechnol.* 56:59-72 (1996); Vorobjev *et al.*, *Nucleosides Nucleotides* 18:2745-2750 (1999); and Caliceti *et al.*, *Bioconjug. Chem.* 10:638-646 (1999), the disclosures of each of which are incorporated herein by reference.

The polyethylene glycol molecules (or other chemical moieties) should be attached to the protein with consideration of effects on functional or antigenic domains of the protein. There are a number of attachment methods available to those skilled in the art, such as, for example, the method disclosed in EP 0 401 384 (coupling PEG to G-CSF), herein incorporated by reference; see also Malik *et al.*, *Exp. Hematol.* 20:1028-1035 (1992), reporting pegylation of GM-CSF using tresyl chloride. For example, polyethylene glycol may be covalently bound through amino acid residues via a reactive group, such as a free amino or carboxyl group. Reactive groups are those to which an activated polyethylene glycol molecule may be bound. The amino acid residues having a free amino group may include lysine residues and the N-terminal amino acid residues; those having a free carboxyl group may include aspartic acid residues glutamic acid residues and the C-terminal amino acid residue. Sulfhydryl groups may also be used as a reactive group for attaching the polyethylene glycol molecules. Preferred for therapeutic purposes is attachment at an amino group, such as attachment at the N-terminus or lysine group.

As suggested above, polyethylene glycol may be attached to proteins via linkage to any of a number of amino acid residues. For example, polyethylene glycol can be linked to proteins via covalent bonds to lysine, histidine, aspartic acid, glutamic acid, or cysteine residues. One or more reaction chemistries may be employed to attach polyethylene glycol to specific amino acid residues (e.g., lysine, histidine, aspartic acid, glutamic acid, or cysteine) of the protein or to more than one type of amino acid residue (e.g., lysine, histidine, aspartic acid, glutamic acid, cysteine and combinations thereof) of the protein.

One may specifically desire proteins chemically modified at the N-terminus. Using polyethylene glycol as an illustration of the present composition, one may select from a variety of polyethylene glycol molecules (by molecular weight, branching, etc.), the proportion of polyethylene glycol molecules to protein (polypeptide) molecules in the reaction mix, the type of pegylation reaction to be performed, and the method of obtaining the selected N-terminally pegylated protein. The method of obtaining the N-terminally pegylated preparation (i.e.,

separating this moiety from other monopegylated moieties if necessary) may be by purification of the N-terminally pegylated material from a population of pegylated protein molecules. Selective proteins chemically modified at the N-terminus modification may be accomplished by reductive alkylation which exploits differential reactivity of different types of primary amino groups (lysine
5 versus the N-terminal) available for derivatization in a particular protein. Under the appropriate reaction conditions, substantially selective derivatization of the protein at the N-terminus with a carbonyl group containing polymer is achieved.

As indicated above, pegylation of the proteins of the invention may be accomplished by any number of means. For example, polyethylene glycol may be attached to the protein either
10 directly or by an intervening linker. Linkerless systems for attaching polyethylene glycol to proteins are described in Delgado et al., Crit. Rev. Thera. Drug Carrier Sys. 9:249-304 (1992); Francis et al., Intern. J. of Hematol. 68:1-18 (1998); U.S. Patent No. 4,002,531; U.S. Patent No. 5,349,052; WO 95/06058; and WO 98/32466, the disclosures of each of which are incorporated herein by reference.

One system for attaching polyethylene glycol directly to amino acid residues of proteins without an intervening linker employs tresylated MPEG, which is produced by the modification of monmethoxy polyethylene glycol (MPEG) using tresylchloride ($\text{ClSO}_2\text{CH}_2\text{CF}_3$). Upon reaction of protein with tresylated MPEG, polyethylene glycol is directly attached to amine groups of the protein. Thus, the invention includes protein-polyethylene glycol conjugates produced by reacting
20 proteins of the invention with a polyethylene glycol molecule having a 2,2,2-trifluoroethane sulphonyl group.

Polyethylene glycol can also be attached to proteins using a number of different intervening linkers. For example, U.S. Patent No. 5,612,460, the entire disclosure of which is incorporated herein by reference, discloses urethane linkers for connecting polyethylene glycol to
25 proteins. Protein-polyethylene glycol conjugates wherein the polyethylene glycol is attached to the protein by a linker can also be produced by reaction of proteins with compounds such as MPEG-succinimidylsuccinate, MPEG activated with 1,1'-carbonyldiimidazole, MPEG-2,4,5-trichloropenylcarbonate, MPEG-p-nitrophenolcarbonate, and various MPEG-succinate derivatives. A number of additional polyethylene glycol derivatives and reaction chemistries for
30 attaching polyethylene glycol to proteins are described in International Publication No. WO 98/32466, the entire disclosure of which is incorporated herein by reference. Pegylated protein products produced using the reaction chemistries set out herein are included within the scope of the invention.

The number of polyethylene glycol moieties attached to each protein of the invention (i.e.,
35 the degree of substitution) may also vary. For example, the pegylated proteins of the invention may be linked, on average, to 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, 15, 17, 20, or more polyethylene glycol molecules. Similarly, the average degree of substitution within ranges such as 1-3, 2-4, 3-5,

4-6, 5-7, 6-8, 7-9, 8-10, 9-11, 10-12, 11-13, 12-14, 13-15, 14-16, 15-17, 16-18, 17-19, or 18-20 polyethylene glycol moieties per protein molecule. Methods for determining the degree of substitution are discussed, for example, in Delgado et al., Crit. Rev. Thera. Drug Carrier Sys. 9:249-304 (1992).

5 The polypeptides of the invention can be recovered and purified from chemical synthesis and recombinant cell cultures by standard methods which include, but are not limited to, ammonium sulfate or ethanol precipitation, acid extraction, anion or cation exchange chromatography, phosphocellulose chromatography, hydrophobic interaction chromatography, affinity chromatography, hydroxylapatite chromatography and lectin chromatography. Most
10 preferably, high performance liquid chromatography ("HPLC") is employed for purification. Well known techniques for refolding protein may be employed to regenerate active conformation when the polypeptide is denatured during isolation and/or purification.

 The polypeptides of the invention may be in monomers or multimers (i.e., dimers, trimers, tetramers and higher multimers). Accordingly, the present invention relates to monomers and
15 multimers of the polypeptides of the invention, their preparation, and compositions (preferably, Therapeutics) containing them. In specific embodiments, the polypeptides of the invention are monomers, dimers, trimers or tetramers. In additional embodiments, the multimers of the invention are at least dimers, at least trimers, or at least tetramers.

 Multimers encompassed by the invention may be homomers or heteromers. As used
20 herein, the term homomer refers to a multimer containing only polypeptides corresponding to a protein of the invention (e.g., the amino acid sequence of SEQ ID NO:Y, an amino acid sequence encoded by SEQ ID NO:X or the complement of SEQ ID NO:X, the amino acid sequence encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, and/or an amino acid sequence encoded by cDNA contained in ATCC Deposit No:Z (including fragments, variants,
25 splice variants, and fusion proteins, corresponding to these as described herein)). These homomers may contain polypeptides having identical or different amino acid sequences. In a specific embodiment, a homomer of the invention is a multimer containing only polypeptides having an identical amino acid sequence. In another specific embodiment, a homomer of the invention is a multimer containing polypeptides having different amino acid sequences. In specific
30 embodiments, the multimer of the invention is a homodimer (e.g., containing two polypeptides having identical or different amino acid sequences) or a homotrimer (e.g., containing three polypeptides having identical and/or different amino acid sequences). In additional embodiments, the homomeric multimer of the invention is at least a homodimer, at least a homotrimer, or at least a homotetramer.

35 As used herein, the term heteromer refers to a multimer containing one or more heterologous polypeptides (i.e., polypeptides of different proteins) in addition to the polypeptides of the invention. In a specific embodiment, the multimer of the invention is a heterodimer, a

heterotrimer, or a heterotetramer. In additional embodiments, the heteromeric multimer of the invention is at least a heterodimer, at least a heterotrimer, or at least a heterotetramer.

Multimers of the invention may be the result of hydrophobic, hydrophilic, ionic and/or covalent associations and/or may be indirectly linked by, for example, liposome formation. Thus, in one embodiment, multimers of the invention, such as, for example, homodimers or homotrimers, are formed when polypeptides of the invention contact one another in solution. In another embodiment, heteromultimers of the invention, such as, for example, heterotrimers or heterotetramers, are formed when polypeptides of the invention contact antibodies to the polypeptides of the invention (including antibodies to the heterologous polypeptide sequence in a fusion protein of the invention) in solution. In other embodiments, multimers of the invention are formed by covalent associations with and/or between the polypeptides of the invention. Such covalent associations may involve one or more amino acid residues contained in the polypeptide sequence (e.g., that recited in SEQ ID NO:Y, encoded by the portion of SEQ ID NO:X as defined in columns 8 and 9 of Table 2, and/or encoded by the cDNA contained in ATCC Deposit No:Z). In one instance, the covalent associations are cross-linking between cysteine residues located within the polypeptide sequences which interact in the native (i.e., naturally occurring) polypeptide. In another instance, the covalent associations are the consequence of chemical or recombinant manipulation. Alternatively, such covalent associations may involve one or more amino acid residues contained in the heterologous polypeptide sequence in a fusion protein. In one example, covalent associations are between the heterologous sequence contained in a fusion protein of the invention (see, e.g., US Patent Number 5,478,925). In a specific example, the covalent associations are between the heterologous sequence contained in a Fc fusion protein of the invention (as described herein). In another specific example, covalent associations of fusion proteins of the invention are between heterologous polypeptide sequence from another protein that is capable of forming covalently associated multimers, such as for example, osteoprotegerin (see, e.g., International Publication NO: WO 98/49305, the contents of which are herein incorporated by reference in its entirety). In another embodiment, two or more polypeptides of the invention are joined through peptide linkers. Examples include those peptide linkers described in U.S. Pat. No. 5,073,627 (hereby incorporated by reference). Proteins comprising multiple polypeptides of the invention separated by peptide linkers may be produced using conventional recombinant DNA technology.

Another method for preparing multimer polypeptides of the invention involves use of polypeptides of the invention fused to a leucine zipper or isoleucine zipper polypeptide sequence. Leucine zipper and isoleucine zipper domains are polypeptides that promote multimerization of the proteins in which they are found. Leucine zippers were originally identified in several DNA-binding proteins (Landschulz et al., Science 240:1759, (1988)), and have since been found in a variety of different proteins. Among the known leucine zippers are naturally occurring peptides

and derivatives thereof that dimerize or trimerize. Examples of leucine zipper domains suitable for producing soluble multimeric proteins of the invention are those described in PCT application WO 94/10308, hereby incorporated by reference. Recombinant fusion proteins comprising a polypeptide of the invention fused to a polypeptide sequence that dimerizes or trimerizes in solution are expressed in suitable host cells, and the resulting soluble multimeric fusion protein is recovered from the culture supernatant using techniques known in the art.

Trimeric polypeptides of the invention may offer the advantage of enhanced biological activity. Preferred leucine zipper moieties and isoleucine moieties are those that preferentially form trimers. One example is a leucine zipper derived from lung surfactant protein D (SPD), as described in Hoppe et al. (FEBS Letters 344:191, (1994)) and in U.S. patent application Ser. No. 08/446,922, hereby incorporated by reference. Other peptides derived from naturally occurring trimeric proteins may be employed in preparing trimeric polypeptides of the invention.

In another example, proteins of the invention are associated by interactions between Flag® polypeptide sequence contained in fusion proteins of the invention containing Flag® polypeptide sequence. In a further embodiment, proteins of the invention are associated by interactions between heterologous polypeptide sequence contained in Flag® fusion proteins of the invention and anti-Flag® antibody.

The multimers of the invention may be generated using chemical techniques known in the art. For example, polypeptides desired to be contained in the multimers of the invention may be chemically cross-linked using linker molecules and linker molecule length optimization techniques known in the art (see, e.g., US Patent Number 5,478,925, which is herein incorporated by reference in its entirety). Additionally, multimers of the invention may be generated using techniques known in the art to form one or more inter-molecule cross-links between the cysteine residues located within the sequence of the polypeptides desired to be contained in the multimer (see, e.g., US Patent Number 5,478,925, which is herein incorporated by reference in its entirety). Further, polypeptides of the invention may be routinely modified by the addition of cysteine or biotin to the C-terminus or N-terminus of the polypeptide and techniques known in the art may be applied to generate multimers containing one or more of these modified polypeptides (see, e.g., US Patent Number 5,478,925, which is herein incorporated by reference in its entirety). Additionally, techniques known in the art may be applied to generate liposomes containing the polypeptide components desired to be contained in the multimer of the invention (see, e.g., US Patent Number 5,478,925, which is herein incorporated by reference in its entirety).

Alternatively, multimers of the invention may be generated using genetic engineering techniques known in the art. In one embodiment, polypeptides contained in multimers of the invention are produced recombinantly using fusion protein technology described herein or otherwise known in the art (see, e.g., US Patent Number 5,478,925, which is herein incorporated by reference in its entirety). In a specific embodiment, polynucleotides coding for a homodimer of

the invention are generated by ligating a polynucleotide sequence encoding a polypeptide of the invention to a sequence encoding a linker polypeptide and then further to a synthetic polynucleotide encoding the translated product of the polypeptide in the reverse orientation from the original C-terminus to the N-terminus (lacking the leader sequence) (see, e.g., US Patent
5 Number 5,478,925, which is herein incorporated by reference in its entirety). In another embodiment, recombinant techniques described herein or otherwise known in the art are applied to generate recombinant polypeptides of the invention which contain a transmembrane domain (or hydrophobic or signal peptide) and which can be incorporated by membrane reconstitution techniques into liposomes (see, e.g., US Patent Number 5,478,925, which is herein incorporated by
10 reference in its entirety).

Antibodies

Further polypeptides of the invention relate to antibodies and T-cell antigen receptors (TCR) which immunospecifically bind a polypeptide, polypeptide fragment, or variant of the
15 invention (e.g., a polypeptide or fragment or variant of the amino acid sequence of SEQ ID NO:Y or a polypeptide encoded by the cDNA contained in ATCC Deposit No:Z, and/or an epitope, of the present invention) as determined by immunoassays well known in the art for assaying specific antibody-antigen binding. Antibodies of the invention include, but are not limited to, polyclonal, monoclonal, multispecific, human, humanized or chimeric antibodies, single chain antibodies, Fab
20 fragments, F(ab') fragments, fragments produced by a Fab expression library, anti-idiotypic (anti-Id) antibodies (including, e.g., anti-Id antibodies to antibodies of the invention), intracellularly-made antibodies (i.e., intrabodies), and epitope-binding fragments of any of the above. The term "antibody," as used herein, refers to immunoglobulin molecules and immunologically active portions of immunoglobulin molecules, i.e., molecules that contain an antigen binding site that
25 immunospecifically binds an antigen. The immunoglobulin molecules of the invention can be of any type (e.g., IgG, IgE, IgM, IgD, IgA and IgY), class (e.g., IgG1, IgG2, IgG3, IgG4, IgA1 and IgA2) or subclass of immunoglobulin molecule. In preferred embodiments, the immunoglobulin molecules of the invention are IgG1. In other preferred embodiments, the immunoglobulin molecules of the invention are IgG4.

30 Most preferably the antibodies are human antigen-binding antibody fragments of the present invention and include, but are not limited to, Fab, Fab' and F(ab')₂, Fd, single-chain Fvs (scFv), single-chain antibodies, disulfide-linked Fvs (sdFv) and fragments comprising either a VL or VH domain. Antigen-binding antibody fragments, including single-chain antibodies, may comprise the variable region(s) alone or in combination with the entirety or a portion of the
35 following: hinge region, CH1, CH2, and CH3 domains. Also included in the invention are antigen-binding fragments also comprising any combination of variable region(s) with a hinge region, CH1, CH2, and CH3 domains. The antibodies of the invention may be from any animal



A DOCPHOENIX

☐ TRNA _____
Transmittal New Application

☐ SPEC _____
Specification

☐ CLM _____
Claims

☐ ABST _____
Abstract

☐ DRW _____
Drawings

☐ OATH _____
Oath or Declaration

☐ ADS _____
Application Data Sheet

☐ A... _____
Amendment Including Elections

☐ A.PE _____
Preliminary Amendment

☐ REM _____
Applicant Remarks in Amendment

☐ IDS _____
IDS Including 1449

☐ 371P _____
PCT Papers in a 371P Application

☐ FOR _____
Foreign Reference

☐ NPL _____
Non-Patent Literature

☐ FRPR _____
Foreign Priority Papers

☐ ARTIFACT _____
Artifact

☐ LET. _____
Misc. Incoming Letter

☐ IMIS _____
Misc. Internal Document

☐ TRREISS _____
Transmittal New Reissue Application

☐ PROTRANS _____
Translation of Provisional in Nonprovisional

☐ BIB _____
Bib Data Sheet

☐ WCLM _____
Claim Worksheet

☐ WFEE _____
Fee Worksheet

☐ APPENDIX _____
Appendix

☐ COMPUTER _____
Computer Program Listing

☐ SPEC NO _____
Specification Not in English

☐ N417 _____
Copy of EFS Receipt Acknowledgement

☐ CRFL _____
Computer Readable Form Transfer Request Filed

☐ CRFS _____
Computer Readable Form Statement

☐ SEQLIST _____
Sequence Listing

☐ SIR. _____
SIR Request

☐ AF/D _____
Affidavit or Exhibit Received

☐ DIST _____
Terminal Disclaimer Filed

☐ PET. _____
Petition

☐ END JOB☐ DUPLEX